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NAS FORT WORTH
5090.3a

FINAL REMOVAL AND CLOSURE OF FUEL HYDRANT SYSTEM TECHNICAL REPORT
ENVIRONMENTAL SITE CHARACTERIZATION SUMMARY APPENDIX B NAS FORT WORTH
TX
12/1/1995
JACOBS ENGINEERING



**NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS**

**ADMINISTRATIVE RECORD
COVER SHEET**

AR File Number 369



United States Air Force Air Force Base Conversion Agency

FINAL

NAS Fort Worth JRB, Texas
(Formerly Carswell AFB, Texas)

REMOVAL/CLOSURE OF THE
FUEL HYDRANT SYSTEM

ENVIRONMENTAL SITE
CHARACTERIZATION SUMMARY
APPENDIX B

DECEMBER 1995



United States Air Force Air Force Base Conversion Agency

FINAL

NAS Fort Worth JRB, Texas
(Formerly Carswell AFB, Texas)

ENVIRONMENTAL SITE
CHARACTERIZATION SUMMARY
APPENDIX B

CAR-J03-10K70100-06-0002

DECEMBER 1995

By:



JACOBS ENGINEERING GROUP INC.
600 17th Street, Suite 1100N
Denver, CO 80202

APPENDIX B
Offsite Laboratory Analytical Results

Appendix B

Control Number/Sample Identification Cross Reference and Laboratory Results

Offsite Lab Control #	Sample Designation	Immunoassay BTEX	Immunoassay PAH Lab Batch #	TPH (ppm)		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX (ppm)	Total PAH (ppm)	Individual Detected PAH Compounds (ppb)
				Method 418.1						Method 8020/602		
				nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A100101	DP 006A	BTEX01- 13	PAH01- 8	—	—	—	—	—	—	nd	nd	nd
FW-A100102	DP 006B	BTEX01- 14	PAH01- 9	—	—	—	—	—	—	nd	nd	nd
FW-A100103	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100104	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100201	DP 011B	BTEX01- 24	PAH01- 14	—	—	—	—	—	—	nd	nd	nd
FW-A100202	DP 011B(FD)	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100301	DP 015A	BTEX01- 29	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100302	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100303	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100401	Trip Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100501	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100502	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100503	DP 023A	BTEX02- 13	PAH02- 4	—	—	—	—	—	—	nd	nd	nd
FW-A100504	Duplicate	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100505	Duplicate	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100506	DP 029B	BTEX03- 12	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100507	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100508	DP 038A	BTEX04- 9	n/a	—	—	—	—	—	—	nd	nd	0.0081
FW-A100509	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100601	DP 044B	BTEX04- 21	n/a	—	—	—	—	—	—	nd	nd	0.0079
FW-A100602	DP 016B	BTEX05- 6	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100603	Trip Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100604	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100605	DP 012A	BTEX05- 8	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100701	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100702	DP 056A	BTEX06- 4	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100703	DP 061A	BTEX06- 6	n/a	4	nd	nd	nd	nd	nd	nd	nd	nd
FW-A100704	DP 056B	BTEX06- 16	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A100705	DP 061A(FD)	BTEX06- 16	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A100706	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100707	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100708	DP 073B	BTEX07- 22	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100801	DP 073C	BTEX07- 23	PAH04- 23	—	—	—	—	—	—	nd	nd	nd
FW-A100802	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd
FW-A100803	Equipment Blank	n/a	n/a	—	—	—	—	—	—	nd	nd	nd

Control Number/Sample Identification Cross Reference and Laboratory Results

Offsite Lab Control #	Sample Designation	Immunoassay BTEX Lab Batch #	Immunoassay PAH Lab Batch #	TPH (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX (ppm)	Total PAH (ppm)	Individual Detected PAH Compounds (ppb)	
											Method 4181	
											Method 8020/602	
											Method 8310	
FW-A100804	Equipment Blank	n/a	n/a	—	—	—	—	—	—	—	nd	
FW-A100805	Trip Blank DP 087A	n/a BTEX08- 12	n/a	—	nd	nd	nd	nd	—	—	—	
FW-A100901	Equipment Blank DP 098B	n/a	n/a	PAH05- 17	nd	nd	nd	nd	—	—	—	
FW-A100902	Equipment Blank DP 103C	BTEX09- 5	PAH05- 17	nd	nd	nd	nd	nd	2200	2.82	Naphthalene - 2800	
FW-A100903	Equipment Blank DP 106B	BTEX09- 17	PAH05- 22	nd	nd	nd	nd	nd	1050	1.58	Naphthalene - 650	
FW-A100904	Equipment Blank DP 108B	BTEX09- 23	n/a	nd	nd	nd	nd	nd	nd	nd	—	
FW-A100905	Equipment Blank DP 109A	n/a	n/a	—	—	—	—	—	nd	nd	nd	
FW-A100906	Equipment Blank DP 114B	BTEX10- 4	PAH06- 7	nd	nd	nd	nd	nd	nd	nd	—	
FW-A100907	Equipment Blank DP 115B	BTEX10- 5	PAH06- 11	nd	nd	nd	nd	nd	nd	nd	—	
FW-A100908	Equipment Blank DP 120B	BTEX10- 14	PAH06- 11	nd	nd	nd	nd	nd	nd	nd	—	
FW-A101001	Equipment Blank DP 122C	BTEX10- 16	PAH06- 11	nd	nd	nd	nd	nd	nd	nd	Naphthalene - 1100	
FW-A101002	Equipment Blank DP 124B	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	—	
FW-A101003	Trip Blank DP 126B	n/a	n/a	—	—	—	—	—	nd	nd	nd	
FW-A101004	Equipment Blank DP 127B	BTEX10- 26	PAH06- 21	nd	nd	nd	nd	nd	nd	nd	—	
FW-A101005	Equipment Blank DP 128B	BTEX10- 33	PAH06- 23	nd	nd	nd	nd	nd	330	980	Naphthalene - 660	
FW-A101006	Equipment Blank DP 129B	BTEX10- 37	PAH06- 23	nd	nd	nd	nd	nd	nd	nd	Naphthalene - 390	
FW-A101007	Trip Blank DP 130B	n/a	n/a	—	—	—	—	—	nd	nd	—	
FW-A101008	Equipment Blank DP 131B	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	
FW-A101101	Equipment Blank DP 146A	BTEX12- 15	PAH07- 27	—	—	—	—	—	nd	nd	—	
FW-A101102	Equipment Blank DP 146A	BTEX15- 15	PAH07- 27	nd	nd	nd	nd	nd	nd	nd	nd	
FW-A101201	Equipment Blank DP 148B	BTEX12- 20	PAH07- 32	nd	nd	nd	nd	nd	nd	nd	nd	
FW-A101202	Equipment Blank DP 148B	BTEX15- 20	PAH08- 5	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101203	Equipment Blank DP 149B	BTEX12- 22	PAH08- 5	—	nd	nd	nd	nd	nd	nd	nd	
FW-A101203	Equipment Blank DP 149B	BTEX15- 22	PAH08- 5	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101204	Equipment Blank DP 150B	BTEX12- 24	PAH08- 7	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101205	Equipment Blank DP 150B	BTEX15- 24	PAH08- 7	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101206	Equipment Blank DP 154B	BTEX13- 11	PAH08- 23	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101207	Equipment Blank DP 154B	n/a	PAH08- 24	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101208	Equipment Blank DP 159B	n/a	PAH08- 25	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101209	Equipment Blank DP 159B	BTEX13- 23	PAH08- 23	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101301	Equipment Blank DP 166B	BTEX14- 11	PAH08- 23	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A101302	Equipment Blank DP 119A	BTEX14- 14	PAH08- 24	4.9	4.7	16.7	0.03	nd	nd	nd	nd	
FW-A101303	Equipment Blank DP 119B	BTEX14- 15	PAH08- 25	nd	nd	nd	nd	nd	nd	nd	nd	
FW-A101304	Equipment Blank DP 119B	—	—	—	—	—	—	—	—	—	nd	

Control Number/Sample Identification Cross Reference and Laboratory Results											
Offsite Lab Control #	Sample Designation	Immunoassay BTEX Lab Batch #	Immunoassay PAH Lab Batch #	TPH (ppm)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	Total BTEX (ppm)	Total PAH (ppm)	Individual Detected PAH Compounds (ppb)
FV-A101305	DP 119C	BTEX14- 16	PAH08- 26	—	—	nd	nd	nd	205.00	32.60	Fluoranthene - 9100 Naphthalene - 23500
FV-A101306	DP 112B	BTEX14- 18	PAH08- 28	—	nd	nd	nd	nd	nd	nd	Naphthalene - 28
FV-A101307	DP 112C	BTEX14- 19	PAH08- 29	—	1800	200	—	—	4.04	0.03	Naphthalene - nd
FV-A101308	Equipment Blank	n/a	n/a	—	nd	nd	nd	nd	—	—	—
FV-A101309	Equipment Blank	n/a	n/a	—	nd	nd	nd	nd	—	—	—
FV-A101401	Trip Blank	n/a	n/a	—	nd	nd	nd	nd	—	—	—
FV-A101501	DP 170A	BTEX16- 5	PAH09- 7	—	nd	nd	nd	nd	nd	nd	nd
FV-A101502	DP 170A(FD)	n/a	n/a	—	nd	nd	nd	nd	nd	nd	Fluoranthene - 2600
FV-A101503	DP 172B	BTEX16- 15	PAH09- 13	—	nd	nd	nd	nd	3.99	6.03	Naphthalene - 910 Phenanthrene - 720 Pyrene - 1800
FV-A101504	DP 172B(FD)	n/a	n/a	—	nd	nd	nd	nd	nd	1.94	Fluoranthene - 620 Fluorene - 500 Naphthalene - 180 Phenanthrene - 140 Pyrene - 500
FV-A101505	Equipment Blank	n/a	n/a	—	nd	nd	nd	nd	nd	nd	nd
FV-A101506	Trip Blank	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101507	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101601	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101602	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101603	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101604	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101605	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101606	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101607	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101608	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101609	Field Duplicate	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101701	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101702	Stockpile #1	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101703	Stockpile #2	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—
FV-A101704	Stockpile #2	n/a	n/a	—	nd	nd	nd	nd	nd	nd	—

Control Number/Sample Identification Cross Reference and Laboratory Results

Offsite Lab Control #	Sample Designation	Immunoassay BTEX		Immunoassay PAH		TPH (ppm)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX (ppm)	Total PAH (ppm)	Individual Detected PAH Compounds (ppb)
		Lab Batch #	Immunoassay PAH Lab Batch #	n/a	n/a								
FW-A101705	Stockpile #2	n/a	n/a	41	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101706	Stockpile #2	n/a	n/a	783	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101707	Stockpile #2	n/a	n/a	184	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101708	Stockpile #2	n/a	n/a	497	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101709	Field Duplicate	n/a	n/a	540	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101801	Stockpile #2	n/a	n/a	264	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101802	Stockpile #2	n/a	n/a	682	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101803	Stockpile #2	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101804	Stockpile #2	n/a	n/a	225	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101805	Stockpile #2	n/a	n/a	394	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101806	Stockpile #2	n/a	n/a	498	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101901	Tank #4	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101902	Tank #5	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101903	Tank #6	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101904	Tank #1	n/a	n/a	66	nd	nd	nd	nd	nd	nd	nd	nd	0.38
FW-A101905	Tank #2	n/a	n/a	440	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101906	Tank #3	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.084
FW-A101907	Tank Excavation	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101908	Tank Excavation	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A101909	Tank Excavation	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A102001	Equipment Blank	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A102002	Equipment Blank	n/a	n/a	1.8	—	—	—	nd	nd	nd	nd	nd	nd
FW-A102003	Trip Blank	n/a	n/a	—	—	—	—	nd	nd	nd	nd	nd	nd
FW-A102004	Equipment Blank	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A102101	Field Duplicate	n/a	n/a	240	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A102102	Field Duplicate	n/a	n/a	300	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A102103	Field Duplicate	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
FW-A102201	Tank Excavation	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

Offsite Lab Control #	Sample Designation	Immunoassay BTEX		Immunoassay PAH		TPH (ppm)	Benzene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	Total BTEX (ppm)	Total PAH (ppm)	Individual Detected PAH Compounds (ppb)	
		Lab Batch #	n/a	Lab Batch #	n/a								
Method 418.1													
FW-A102202	Tank Excavation	n/a	n/a	n/a	n/a	110	nd	nd	nd	nd	nd	Method 8310	
FW-A102203	Tank Excavation	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	Fluoranthene - 400	
FW-A102204	Tank Excavation	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	Naphthalene - 380	
FW-A102205	Tank Excavation	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	Pyrene - 240	
FW-A102206	Tank Excavation	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	Naphthalene - 4100	
FW-A102207	Tank Excavation	n/a	n/a	n/a	n/a	330	nd	nd	nd	nd	nd	nd	
FW-A102208	Tank Excavation	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A102209	Tank Excavation	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A102301	Stockpile #3	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A102302	Stockpile #3	n/a	n/a	n/a	n/a	220	nd	nd	nd	nd	nd	nd	
FW-A102303	Stockpile #3	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A102304	Stockpile #3	n/a	n/a	n/a	n/a	170	nd	nd	nd	nd	nd	nd	
FW-A102305	Stockpile #3	n/a	n/a	n/a	n/a	110	nd	nd	nd	nd	nd	nd	
FW-A102306	Stockpile #3	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A102307	Stockpile #3	n/a	n/a	n/a	n/a	130	nd	nd	nd	nd	nd	nd	
FW-A102308	Stockpile #3	n/a	n/a	n/a	n/a	220	nd	nd	nd	nd	nd	nd	
FW-A102309	Stockpile #3	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	
FW-A102401	Stockpile #3	n/a	n/a	n/a	n/a	460	nd	nd	nd	nd	nd	nd	
FW-A102402	Stockpile #3	n/a	n/a	n/a	n/a	450	nd	nd	nd	nd	nd	nd	
FW-A102403	Stockpile #3	n/a	n/a	n/a	n/a	240	nd	nd	nd	nd	nd	nd	
FW-A102701	Equipment Blank	n/a	n/a	n/a	n/a	39	nd	nd	nd	nd	nd	nd	
FW-A102702	Equipment Blank	n/a	n/a	n/a	n/a	610	nd	nd	nd	nd	nd	nd	
FW-A102703	Equipment Blank	n/a	n/a	n/a	n/a	280	nd	nd	nd	nd	nd	nd	
FW-A102704	Equipment Blank	n/a	n/a	n/a	n/a	nd	nd	nd	nd	nd	nd	nd	

FD = field duplicate
n/a = not applicable

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polynuclear Aromatic Hydrocarbons
TPH = Total Petroleum Hydrocarbons
— = Sample not analyzed by method



365

CK Y incorporated
Analytical Laboratories

Date: 04-18-1995
CKY Batch No.: 95C064

RECEIVED

Attn: Lynn Schuetter

APR 19 1995

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

JE • Denver

Subject: Laboratory Report
Project: NAS FORT WORTH 10-K701-00

Enclosed is the Laboratory report for samples received on 03/14/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include:

Sample ID	Control No.	Matrix	Analysis
FW-A100101	C064-01	Soil	EPA 8020
FW-A100102	C064-02	Soil	EPA 8310
FW-A100103	C064-03	Water	EPA 8020
FW-A100104	C064-04	Water	EPA 8310
FW-A100201	C064-05	Soil	EPA 8020
FW-A100202	C064-06	Soil	EPA 8310
FW-A100301	C064-07	Soil	EPA 8020
FW-A100302	C064-08	Water	EPA 8020
FW-A100303	C064-09	Water	EPA 8310
FW-A100401	C064-10	Water	EPA 8020
FW-A100501	C073-01	Water	EPA 8020
FW-A100502	C073-02	Water	EPA 8310
FW-A100503	C073-03	Soil	EPA 8020
FW-A100504	C073-04	Water	EPA 8310
FW-A100505	C073-05	Water	EPA 8020
FW-A100506	C073-06	Soil	EPA 8310
FW-A100507	C073-07	Water	EPA 8020
FW-A100508	C073-08	Soil	EPA 8020
FW-A100509	C073-09	Water	EPA 8020
FW-A100601	C073-10	Soil	EPA 8310

Sample ID	Control No.	Matrix	Analysis
FW-A100602	C073-11	Soil	EPA 8020 EPA 8310
FW-A100603	C073-12	Water	EPA 8020
FW-A100604	C073-13	Water	EPA 8020
FW-A100605	C073-14	Water	EPA 8310

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 8020
BTEX

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 CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/09/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
 BATCH NO.: 95C064 DATE EXTRACTED: NA
 SAMPLE ID: FW-A100101 DATE ANALYZED: 03/23/95
 CONTROL NO.: C064-01 MATRIX: SOIL
 % MOISTURE: 15.13 DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	5.9
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	93	47-135

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POL: Practical Quantitation Limit
Analyzed by GC/MS



EPA METHOD 8020
BTEX

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CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 03/09/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100102 DATE ANALYZED: 03/14/95
CONTROL NO.: C064-02 MATRIX: SOIL
% MOISTURE: 16.18 DILUTION FACTOR: 1
=====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	71	47-135

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/10/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/14/95
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100201	DATE ANALYZED:	03/23/95
CONTROL NO.:	C064-05	MATRIX:	SOIL
% MOISTURE:	16.10	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
Bromofluorobenzene	81	47-135

=====

POL: Practical Quantitation Limit
Analyzed by GC/MS



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/10/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100202 DATE ANALYZED: 03/14/95
CONTROL NO.: C064-06 MATRIX: SOIL
% MOISTURE: 18.64 DILUTION FACTOR: 1
=====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Benzene	ND	2.5
Toluene	14	2.5
Ethylbenzene	6.9	2.5
Total Xylenes	160	6.1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	76	47-135

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 03/10/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100301 DATE ANALYZED: 03/15/95
CONTROL NO.: C064-07 MATRIX: SOIL
% MOISTURE: 15.10 DILUTION FACTOR: 1
=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	5.9
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	74	47-135

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	03/14/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100503	DATE ANALYZED:	03/24/95
CONTROL NO.:	C073-03	MATRIX:	SOIL
% MOISTURE:	15.56	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	5.9
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
Bromofluorobenzene	80	47-135

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

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CLIENT: Jacobs Engineering Inc DATE COLLECTED: 03/15/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/18/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100506 DATE ANALYZED: 03/27/95
CONTROL NO.: C073-06 MATRIX: SOIL
% MOISTURE: 8.34 DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	56	47-135

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	03/16/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100508	DATE ANALYZED:	03/30/95
CONTROL NO.:	C073-08	MATRIX:	SOIL
% MOISTURE:	22.45	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.6
Toluene	ND	2.6
Ethylbenzene	ND	2.6
Total Xylenes	ND	6.4
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
Bromofluorobenzene	55	47-135

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	03/17/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100602	DATE ANALYZED:	03/30/95
CONTROL NO.:	C073-11	MATRIX:	SOIL
% MOISTURE:	5.40	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/Kg)
Benzene	ND	2.1
Toluene	ND	2.1
Ethylbenzene	196	2.1
Total Xylenes	82	5.3
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	101	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	VBLK01	DATE ANALYZED:	03/14/95
CONTROL NO.:	CBLK01	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	75	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering Inc DATE COLLECTED: NA
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
 BATCH NO.: 95C064 DATE EXTRACTED: NA
 SAMPLE ID: VBLK02 DATE ANALYZED: 03/15/95
 CONTROL NO.: CBLK-03 MATRIX: SOIL
 % MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	83	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	VBLK03	DATE ANALYZED:	03/23/95
CONTROL NO.:	CBL19-3	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	89	47-135

=====

PQL: Practical Quantitation Limit



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BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: VBLK04 DATE ANALYZED: 03/24/95
CONTROL NO.: CVBLK17 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	90	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: VBLK05 DATE ANALYZED: 03/27/95
CONTROL NO.: CVBLK20 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1
=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	76	47-135

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: VBLK06 DATE ANALYZED: 03/30/95
CONTROL NO.: CVBLK29 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/Kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	82	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

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CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/09/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100103 DATE ANALYZED: 03/24/95
CONTROL NO.: C064-03 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	86	68-120

=====

PQL: Practical Quantitation Limit

CKY

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EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 03/10/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100302 DATE ANALYZED: 03/24/95
CONTROL NO.: C064-08 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	88	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/13/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100401 DATE ANALYZED: 03/24/95
CONTROL NO.: C064-10 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	22
Ethylbenzene	ND	5
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	76	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/13/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/18/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100501 DATE ANALYZED: 03/27/95
CONTROL NO.: C073-01 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	3
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	70	68-120

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/14/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100504	DATE ANALYZED:	03/27/95
CONTROL NO.:	C073-04	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
Bromofluorobenzene	68	68-120

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/15/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100507	DATE ANALYZED:	03/27/95
CONTROL NO.:	C073-07	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	8.1	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	74	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/16/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/18/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100509 DATE ANALYZED: 03/27/95
CONTROL NO.: C073-09 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	7.9	22
Ethylbenzene	ND	5
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	68-120

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	03/17/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100603	DATE ANALYZED:	03/27/95
CONTROL NO.:	C073-12	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	94	68-120

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/17/95
PROJECT: NAS FORT WORTH 10-k701-00 DATE RECEIVED: 03/18/95
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: FW-A100604 DATE ANALYZED: 03/27/95
CONTROL NO.: C073-13 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	4.9	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	90	68-120

=====

PQL: Practical Quantitation Limit



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EPA METHOD 8020
BTEX

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CLIENT:	Jacobs Engineering, Inc	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C064	DATE EXTRACTED:	NA
SAMPLE ID:	VBLK04	DATE ANALYZED:	03/24/95
CONTROL NO.:	CVBLK17	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	90	68-120

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95C064 DATE EXTRACTED: NA
SAMPLE ID: VBLK05 DATE ANALYZED: 03/27/95
CONTROL NO.: CVBLK20 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	76	68-120

=====

PQL: Practical Quantitation Limit



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CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8020
 MATRIX: SOIL
 % MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: 03/18/95
 SAMPLE ID: FW-A100503 DATE EXTRACTED: NA
 CONTROL NO.: C073-03 DATE ANALYZED: 03/24/95

ACCESSION: 95C064 95C073

PARAMETER	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Benzene	ND	35.53	27.24	77	35.53	28.42	80	4
Toluene	ND	35.53	26.05	73	35.53	28.42	80	9
Ethylbenzene	ND	35.53	24.87	70	35.53	26.05	73	5
Total Xylenes	ND	107	89	83	107	82	77	8

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Total Xylenes	81-129	81-129



CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8020
 MATRIX: WATER

BATCH NO.: 95C064 DATE RECEIVED: 03/14/95
 SAMPLE ID: FW-A100302 DATE EXTRACTED: NA
 CONTROL NO.: C064-08 DATE ANALYZED: 03/24/95

ACCESSION: 95C064 95C073

PARAMETER	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	% REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	% REC	% RPD
Benzene	ND	30.00	24.00	80	30.00	26.00	87	8
Toluene	ND	30.00	24.00	80	30.00	26.00	87	8
Ethylbenzene	ND	30.00	25.00	83	30.00	27.00	90	8
Total Xylenes	ND	90.00	74.00	82	90.00	79.00	88	7

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Total Xylenes	81-129	81-129



CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8020
 MATRIX: WATER

BATCH NO.: 95C064 DATE RECEIVED: 03/18/95
 SAMPLE ID: FW-A100604 DATE EXTRACTED: NA
 CONTROL NO.: C073-13 DATE ANALYZED: 03/27/95

ACCESSION: 94C064 94C073

PARAMETER	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	% MS REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	% MSD REC	% RPD
Benzene	ND	30.00	34.00	113	30.00	34.00	113	0
Toluene	4.90	30.00	41.00	120	30.00	41.00	120	0
Ethylbenzene	ND	30.00	33.00	110	30.00	34.00	113	3
Total Xylenes	ND	90.00	103.00	114	90.00	102.00	113	1

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Total Xylenes	81-129	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8020
 MATRIX: WATER
 % MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: NA
 SAMPLE ID: LCS1 DATE EXTRACTED: NA
 CONTROL NO.: CLCS-01 DATE ANALYZED: 03/14/95

ACCESSION: 95C064 95C073

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	30.00	30.00		100
Toluene	30.00	30.00		100
Ethylbenzene	30.00	27.00		90
Total Xylenes	90.00	83.00		92

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: WATER
% MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS2 DATE EXTRACTED: NA
CONTROL NO.: CLCS-02 DATE ANALYZED: 03/14/95

ACCESSION: 95C064 95C073

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	30.00	31.00		103
Toluene	30.00	35.00		117
Ethylbenzene	30.00	32.00		107
Total Xylenes	90.00	97.00		108

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: WATER
% MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS3 DATE EXTRACTED: NA
CONTROL NO.: CVLCS14 DATE ANALYZED: 03/24/95

ACCESSION: 94C064 95C073

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	40.00	33.00		83
Toluene	40.00	33.00		83
Ethylbenzene	40.00	33.00		83
Total Xylenes	120	101		84

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: WATER
% MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS4 DATE EXTRACTED: NA
CONTROL NO.: CVLCS15 DATE ANALYZED: 03/27/95

ACCESSION: 95C064 95C073

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS RECOVERY (%)
Benzene	30.00	25.00	83
Toluene	30.00	25.00	83
Ethylbenzene	30.00	25.00	83
Total Xylenes	90.00	74.00	82

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: WATER
% MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS5 DATE EXTRACTED: NA
CONTROL NO.: CVLCS23 DATE ANALYZED: 03/30/95

ACCESSION: 95C064 95C073

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	30.00	33.00		110
Toluene	30.00	32.00		107
Ethylbenzene	30.00	30.00		100
Total Xylenes	90.00	94.00		104

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



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CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: WATER
% MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS6 DATE EXTRACTED: NA
CONTROL NO.: IRV01 DATE ANALYZED: 03/30/95

ACCESSION: 95C064 95C073

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	50.00	57.00		114
Toluene	50.00	57.00		114
Ethylbenzene	50.00	54.00		108
Total Xylenes	50.00	64.70		129

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/09/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
 BATCH NO.: 95C064 DATE EXTRACTED: 03/16/95
 SAMPLE ID: FW-A100101 DATE ANALYZED: 03/17/95
 CONTROL NO.: C064-01 MATRIX: SOIL
 % MOISTURE: 15.13 DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Acenaphthene	ND	15
Acenaphthylene	ND	59
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	87	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering Inc DATE COLLECTED: 03/09/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
 BATCH NO.: 95C064 DATE EXTRACTED: 03/16/95
 SAMPLE ID: FW-A100102 DATE ANALYZED: 03/17/95
 CONTROL NO.: C064-02 MATRIX: SOIL
 % MOISTURE: 16.18 DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	60
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	100	30-140

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/10/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/14/95
BATCH NO.:	95C064	DATE EXTRACTED:	03/16/95
SAMPLE ID:	FW-A100201	DATE ANALYZED:	03/17/95
CONTROL NO.:	C064-05	MATRIX:	SOIL
% MOISTURE:	16.10	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphthylene	ND	60
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenz(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	95	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/10/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/14/95
BATCH NO.:	95C064	DATE EXTRACTED:	03/16/95
SAMPLE ID:	FW-A100202	DATE ANALYZED:	03/17/95
CONTROL NO.:	C064-06	MATRIX:	SOIL
% MOISTURE:	18.64	DILUTION FACTOR:	1

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	92	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering Inc DATE COLLECTED: 03/14/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/18/95
 BATCH NO.: 95C064 DATE EXTRACTED: 03/21/95
 SAMPLE ID: FW-A100503 DATE ANALYZED: 03/28/95
 CONTROL NO.: C073-03 MATRIX: SOIL
 % MOISTURE: 15.56 DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	50
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenz(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	100	30-140

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/17/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	03/21/95
SAMPLE ID:	FW-A100602	DATE ANALYZED:	03/29/95
CONTROL NO.:	C073-11	MATRIX:	SOIL
% MOISTURE:	5.40	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Acenaphthene	829	14
Acenaphtylene	ND	53
Anthracene	ND	14
Benzo(a)anthracene	ND	14
Benzo(b)fluoranthene	ND	14
Benzo(k)fluoranthene	ND	14
Benzo(g,h,i)perylene	ND	14
Benzo(a)pyrene	ND	14
Chrysene	ND	14
Dibenz(a,h)anthracene	ND	14
Fluoranthene	ND	14
Fluorene	ND	14
Indeno(1,2,3-cd)pyrene	ND	14
Naphthalene	ND	14
Phenanthrene	ND	14
Pyrene	ND	14
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	95	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
 BATCH NO.: 95C064 DATE EXTRACTED: 03/16/95
 SAMPLE ID: PBLK01 DATE ANALYZED: 03/17/95
 CONTROL NO.: C064-B1S MATRIX: SOIL
 % MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Acenaphthene	ND	13
Acenaphthylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1,2,3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	104	30-140

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PQL: Practical Quantitation Limit



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EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C064	DATE EXTRACTED:	03/21/95
SAMPLE ID:	PBLK02	DATE ANALYZED:	03/28/95
CONTROL NO.:	C073-B1S	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Acenaphthene	ND	13
Acenaphtylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1,2,3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	106	30-140

PQL: Practical Quantitation Limit



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CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: 16.18

BATCH NO.: 95C064 DATE RECEIVED: 03/14/95
 SAMPLE ID: FW-A100102 DATE EXTRACTED: 03/16/95
 CONTROL NO.: C064-02 DATE ANALYZED: 03/17/95

ACCESSION: 95C064

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Naphthalene	ND	119	113	95	119	116	98	3
Phenanthrene	ND	119	125	105	119	126	106	1
Pyrene	ND	119	113	95	119	116	98	3
Benzo(a)pyrene	ND	119	97	82	119	99	83	2

QC LIMIT: 30-140 30-140



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CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: WATER

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 03/16/95
CONTROL NO.: C064-L1W/1D DATE ANALYZED: 03/17/95

ACCESSION: 95C064

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	% LCS REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	% LCSD REC	% RPD
Naphthalene	ND	2.00	1.58	79	2.00	1.69	85	7
Phenanthrene	ND	2.00	1.60	80	2.00	1.82	91	13
Pyrene	ND	2.00	1.93	97	2.00	2.09	104	8
Benzo(a)pyrene	ND	2.00	1.04	52	2.00	0.95	48	9
QC LIMIT:				30-140			30-140	



**CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: WATER

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS2/LCS2D DATE EXTRACTED: 03/20/95
CONTROL NO.: C073-L1W/1D DATE ANALYZED: 03/28/95

ACCESSION: 95C073

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	% LCS REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	% LCSD REC	% RPD
Naphthalene	ND	2.00	1.38	69	2.00	1.38	69	0
Phenanthrene	ND	2.00	1.25	63	2.00	1.02	51	20
Pyrene	ND	2.00	1.87	94	2.00	1.93	97	0
Benz(a)pyrene	ND	2.00	1.51	76	2.00	1.51	97	0

OC LIMIT: 30-140 30-140

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc	DATE COLLECTED:	03/09/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/14/95
BATCH NO.:	95C064	DATE EXTRACTED:	03/16/95
SAMPLE ID:	FW-A100104	DATE ANALYZED:	03/17/95
CONTROL NO.:	C064-04	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	results (ug/L)	POL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenz(a, h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1, 2, 3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	113	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/10/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/14/95
 BATCH NO.: 95C064 DATE EXTRACTED: 03/16/95
 SAMPLE ID: FW-A100303 DATE ANALYZED: 03/17/95
 CONTROL NO.: C064-09 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/L)	POL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenz(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	115	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc DATE COLLECTED: 03/13/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/18/95
 BATCH NO.: 95C064 DATE EXTRACTED: 03/20/95
 SAMPLE ID: FW-A100502 DATE ANALYZED: 03/28/95
 CONTROL NO.: C073-02 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenz(a, h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1, 2, 3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	121	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/14/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	03/20/95
SAMPLE ID:	FW-A100505	DATE ANALYZED:	03/28/95
CONTROL NO.:	C073-05	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	.1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibeno(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	116	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/17/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/18/95
BATCH NO.:	95C064	DATE EXTRACTED:	03/20/95
SAMPLE ID:	FW-A100605	DATE ANALYZED:	03/28/95
CONTROL NO.:	C073-14	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	BB	.21
Anthracene	BB	.21
Benzo(a)anthracene	BB	.21
Benzo(b)fluoranthene	BB	.21
Benzo(k)fluoranthene	BB	.21
Benzo(g,h,i)perylene	BB	.21
Benzo(a)pyrene	BB	.21
Chrysene	BB	.21
Dibenzo(a,h)anthracene	BB	.21
Fluoranthene	BB	.21
Fluorene	BB	.21
Indeno(1,2,3-cd)pyrene	BB	.21
Naphthalene	BB	.21
Phenanthrene	BB	.21
Pyrene	BB	.25
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	102	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

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CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C064	DATE EXTRACTED:	03/16/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	03/17/95
CONTROL NO.:	C064-B1W	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	102	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C064	DATE EXTRACTED:	03/20/95
SAMPLE ID:	PBLK02	DATE ANALYZED:	03/28/95
CONTROL NO.:	C073-B1W	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	.1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenz(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	114	30-140

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: 15.56

BATCH NO.: 95C064 DATE RECEIVED: 03/18/95
 SAMPLE ID: FW-A100503 DATE EXTRACTED: 03/21/95
 CONTROL NO.: C073-03 DATE ANALYZED: 03/28/95

ACCESSION: 95C073

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% REC	MSD CONC (ug/kg)	% RPD
Naphthalene	ND	118	111	94	118	108	91	108	3
Phenanthrene	ND	118	118	100	118	118	100	118	0
Pyrene	ND	118	106	89	118	103	87	103	2
Benzo(a)pyrene	ND	118	82	69	118	80	67	80	2
QC LIMIT:				30-140				30-140	



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: SOIL
% MOISTURE: NA

BATCH NO.: 95C064 DATE RECEIVED: NA
SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 03/16/95
CONTROL NO.: C064-L1S1D DATE ANALYZED: 03/17/95

ACCESSION: 95C064

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	LCS CONC (ug/kg)	% LCS REC	SPIKE ADDED (ug/kg)	LCSD CONC (ug/kg)	% LCSD REC	% RPD
Naphthalene	ND	100	96	96	100	98	98	2
Phenanthrene	ND	100	87	87	100	86	86	1
Pyrene	ND	100	96	96	100	99	99	3
Benzo(a)pyrene	ND	100	82	82	100	85	85	4
QC LIMIT:			30-140			30-140		

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL

BATCH NO.: 95C064 DATE RECEIVED: NA
 SAMPLE ID: LCS2/LCS2D DATE EXTRACTED: 03/21/95
 CONTROL NO.: C073-L1S/1D DATE ANALYZED: 03/28/95

ACCESSION: 95C073

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% REC	MSD % RPD
Naphthalene	ND	100	93	93	100	98	98	5
Phenanthrene	ND	100	79	79	100	81	81	3
Pyrene	ND	100	94	94	100	97	97	1
Benz(a)pyrene	ND	100	86	86	100	87	87	1

QC LIMIT: 30-140 30-140



SDG #95C064

95C064

DI / WB2



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595-8855 FAX (303) 595-8857

FW-A1001

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>NAS Ft. Worth</i>						LABORATORY NAME & ADDRESS:				
PROJECT NUMBER:										
WBS CODE:		SUBCONTRACT / D.O. No.								
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT
	DATE	TIME								
1 FW-A 100101	3/9/95	14:22	<i>mj</i>	1	4 oz glass	-	S	BTEX & PAH		T=2°C 86
2 FW-A 100102	3/9/95	14:45	<i>mj</i>	1	4 oz glass	-	S	BTEX & PAH	48-hr.	
3 FW-A 100103	3/9/95	18:40	MDS	2	40 ml VOA	HCl	W	BTEX & PAH = DDS		
4 FW-A 100104	3/9/95	18:40	DDS	1	1 liter	<i>Na₂ S₂O₃</i>	W	PAH		
5 FW-A 100201	3/10/95	10:30	<i>mj</i>	1	4 oz glass	-	S	BTEX & PAH		
6 FW-A 100202	3/10/95	10:30	<i>mj</i>	1	4 oz glass	-	S	BTEX & PAH	48-hr.	
7 FW-A 100301	3/10/95	15:58	<i>mj</i>	1	4 oz glass	-	S	BTEX	48-hr.	
8 FW-A 100302	3/10/95	19:50	<i>DDS</i>	2	40 ml VOA	HCl	W	BTEX		
9 FW-A 100303	3/10/95	19:50	DDS	1	1-liter	<i>Na₂ S₂O₃</i>	W	PAH		
COMMENTS:										
COLLECTED & RELEASED BY <i>McCurdy</i>			DATE 3/13/95	TIME 17:10	TURNAROUND TIME 48-HR ON SELECTED SAMPLES					
RECEIVED BY <i>JG Parker</i>			DATE 3/14/95	TIME 10:10	RELINQUISHED BY			DATE / /	TIME :	
RECORD RETURNED BY			DATE / /	TIME :	SHIPPING NUMBER: 4786919826					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SD LT #95C064

95C064

FLW-A1004

WB2



JACOBS ENGINEERING GROUP INC.
800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595-8865 FAX (303) 595-8867

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>NAS - Ft. Worth</i>				LABORATORY NAME & ADDRESS: <i>CKY Inc.</i>						
PROJECT NUMBER: <i>10K70/00</i>				<i>630 MAPLE AVE</i>						
WBS CODE:		SUBCONTRACT / D.O. No.			<i>TORRANCE, CA</i>					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	AC	CONDITION ON RECEIPT
	DATE	TIME								
10	<i>FW-A 160401</i>	<i>3/13/95</i>	<i>1400</i>	<i>DOS</i>	<i>2</i>	<i>40 mL VCA</i>	<i>HCl</i>	<i>W</i>	<i>SW8020</i>	<i>T=2°C 98</i>
COMMENTS: <i>DOS</i>										

COLLECTED & RELEASED BY <i>John Sch</i>	DATE <i>3/13/95</i>	TIME <i>12:10</i>	TURNAROUND TIME
RECEIVED BY <i>J Schef</i>	DATE <i>3/14/95</i>	TIME <i>10:10</i>	RELINQUISHED BY
RECORD RETURNED BY	DATE <i>/ /</i>	TIME <i>:</i>	SHIPPING NUMBER: <i>4786919826</i>

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SD & #95 C064

95C073

FW-A1005

D2/WA2



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595-8856 FAX (303) 595-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS - FT WORTH					LABORATORY NAME & ADDRESS: CKY INC.				
PROJECT NUMBER: 10K 70100					630 MAPLE AVE				
WBS CODE:		SUBCONTRACT / D.O. No.			TORRANCE CA				
SAMPLE NUMBER	COLLECTION DATE	TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC
1 FW-A100501	3/13/95	1830	MD5	2	40 ml VOA	HCl	W	SW8020 BTEX	T=4°C 4°F
2 FW-A100502	3/13/95	1830	MD5	1	1-L amber	Na ₂ SiO ₃	W	SW8310 PAH	
3 FW-A100503	3/14/95	9:39	mj	1	402 glass	4°C	S	SW8020 BTEX SW8310 PAH	
4 FW-A100504	3/14/95	18:00	mj	2	40 ml VOA	HCl	W	SW8020 BTEX	
5 FW-A100505	3/14/95	18:00	mj	1	1-L amber	Na ₂ SiO ₃	W	SW8310 PAH	
6 FW-A100506	3/15/95	10:49	mj	1	40 oz glass	4°C	S	SW8020 BTEX	
7 FW-A100507	3/15/95	18:55	MD5	2	40 ml VOA	HCl	W	SW8020 BTEX	
8 FW-A100508	3/16/95	15:16	mj	1	402 glass	4°C	S	SW8020 BTEX	
9 FW-A100509	3/16/95	19:07	MD5	2	40 ml VOA	HCl	W	SW8020 BTEX	

COMMENTS:

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME		
<i>[Signature]</i>	3/17/95	18:00			
RECEIVED BY	DATE	TIME	RELINQUISHED BY	DATE	TIME
<i>[Signature]</i>	3/18/95	9:30			
RECORD RETURNED BY	DATE	TIME	SHIPPING NUMBER: 4786919804		

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SDG #95C064.



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 565 - 8858 FAX (303) 565 - 8857

FW-A1006

D2/WA2

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

COMMENTS:

COLLECTED & RELEASED BY <i>M. Williams</i>	DATE 3/17/95	TIME 10:00	TURNAROUND TIME		
RECEIVED BY <i>JSP/CH</i>	DATE 3/18/95	TIME 9:30	RELINQUISHED BY	DATE / /	TIME :
RECORD RETURNED BY	DATE / /	TIME :			
			SHIPPING NUMBER: 478 G91 9804		

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



3359 71

C K Y incorporated Analytical Laboratories

Date: 04-19-1995
CKY Batch No.: 95C110

RECEIVED

APR 20 1995

JE • Denver

Attn: Lynn Schuetter
Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

Subject: Laboratory Report
Project: NAS FORT WORTH 10-K701-00

Enclosed is the Laboratory report for samples received on 03/24/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include:

Sample ID	Control No.	Matrix	Analysis
FW-A100701	C110-01	Soil	EPA 8020
FW-A100702	C110-02	Water	EPA 602
FW-A100703	C110-03	Soil	EPA 8020
FW-A100806	C110-04	Water	EPA 602
FW-A100705	C110-05	Soil	EPA 8020
FW-A100706	C110-06	Soil	EPA 8020
			EPA 8310
FW-A100707	C110-07	Water	EPA 602
FW-A100708	C110-08	Water	EPA 8310
FW-A100704	C110-09	Soil	EPA 8020
FW-A100801	C110-10	Soil	EPA 8020
FW-A100802	C110-11	Soil	EPA 8310
FW-A100803	C110-12	Water	EPA 602
FW-A100804	C110-13	Water	EPA 8310
FW-A100805	C110-14	Water	EPA 602

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: 03/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/24/95
BATCH NO.: 95C110 DATE EXTRACTED: NA
SAMPLE ID: FW-A100701 DATE ANALYZED: 03/29/95
CONTROL NO.: C110-01 MATRIX: SOIL
% MOISTURE: 17.66 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6.1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	54	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	03/20/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100703	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-03	MATRIX:	SOIL
% MOISTURE:	14.99	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	5.9
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	59	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/21/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/24/95
 BATCH NO.: 95C110 DATE EXTRACTED: NA
 SAMPLE ID: FW-A100705 DATE ANALYZED: 03/31/95
 CONTROL NO.: C110-05 MATRIX: SOIL
 % MOISTURE: 16.73 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/Kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	52	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100706	DATE ANALYZED:	03/29/95
CONTROL NO.	C110-06	MATRIX:	SOIL
% MOISTURE:	16.91	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	52	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	03/20/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100704	DATE ANALYZED:	03/29/95
CONTROL NO.:	C110-09	MATRIX:	SOIL
% MOISTURE:	9.26	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	78	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	03/22/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100801	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-10	MATRIX:	SOIL
% MOISTURE:	17.73	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6.1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	59	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/22/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100802	DATE ANALYZED:	03/29/95
CONTROL NO.:	C110-11	MATRIX:	SOIL
% MOISTURE:	11.13	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.3
Toluene	ND	2.3
Ethylbenzene	ND	2.3
Total Xylenes	ND	5.6

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	51	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95C110 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 03/29/95
CONTROL NO.: CVBLK22 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	85	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95C110 DATE EXTRACTED: NA
SAMPLE ID: VBLK02 DATE ANALYZED: 03/31/95
CONTROL NO.: CVBLK31 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	88	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8020
 MATRIX: SOIL
 % MOISTURE: 17.73

BATCH NO.: 95C110 DATE RECEIVED: 03/24/95
 SAMPLE ID: FW-A100801 DATE EXTRACTED: NA
 CONTROL NO.: C110-10 DATE ANALYZED: 04/13/95

ACCESSION: 95C110

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Benzene	ND	36.47	35.25	97	36.47	35.25	97	0
Toluene	ND	36.47	35.25	97	36.47	34.03	93	4
Ethylbenzene	ND	36.47	36.47	100	36.47	34.03	93	7
Total Xylenes	ND	109	108	99	109	102	93	6

QC LIMIT:

Benzene	57-129	57-129
Ethylbenzene	66-126	66-126
Toluene	57-129	57-129
Total Xylenes	81-129	81-129

NOTE: Sample C110-10 was analyzed within holding time.



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: SOIL

=====

BATCH NO.: 95C110 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: CVLCS25 DATE ANALYZED: 03/31/95

ACCESSION: 95C110

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	30	28		93
Toluene	30	28		93
Ethylbenzene	30	29		97
Total Xylenes	90	85		94

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: SOIL

BATCH NO.: 95C110 DATE RECEIVED: NA
SAMPLE ID: LCS2 DATE EXTRACTED: NA
CONTROL NO.: CVLCS17 DATE ANALYZED: 03/29/95

ACCESSION: 95C110

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	30	35		117
Toluene	30	35		117
Ethylbenzene	30	34		113
Total Xylenes	90	106		118

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 03/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/24/95
BATCH NO.: 95C110 DATE EXTRACTED: NA
SAMPLE ID: FW-A100702 DATE ANALYZED: 03/31/95
CONTROL NO.: C110-02 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	POL (ug/L)
Benzene	4.0	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	92	68-120

=====

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: 03/20/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/24/95
BATCH NO.: 95C110 DATE EXTRACTED: NA
SAMPLE ID: FW-A100806 DATE ANALYZED: 03/31/95
CONTROL NO.: C110-04 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	1.9	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	92	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: 03/21/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 03/24/95
BATCH NO.: 95C110 DATE EXTRACTED: NA
SAMPLE ID: FW-A100707 DATE ANALYZED: 03/31/95
CONTROL NO.: C110-07 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	1.5	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	89	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	03/22/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100803	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-12	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	68-120

=====

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	03/23/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100805	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-14	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
Bromofluorobenzene	92	68-120

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C110	DATE EXTRACTED:	NA
SAMPLE ID:	VBLK01	DATE ANALYZED:	03/31/95
CONTROL NO.:	CVBLK31	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
Bromofluorobenzene	88	68-120

PQL: Practical Quantitation Limit



CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8020
 MATRIX: WATER

BATCH NO.: 95C110 DATE RECEIVED: 03/24/95
 SAMPLE ID: FW-A100805 DATE EXTRACTED: NA
 CONTROL NO.: C110-14 DATE ANALYZED: 03/31/95

ACCESSION: 95C110

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	% MS REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	% MSD REC	% RPD
Benzene	ND	30	32	107	30	33	110	3
Toluene	ND	30	31	103	30	32	107	-
Ethylbenzene	ND	30	29	97	30	30	100	-
Total Xylenes	ND	90	89	99	90	91	101	2

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Total Xylenes	81-129	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8020
MATRIX: WATER

BATCH NO.: 95C110 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: CVLCS25 DATE ANALYZED: 03/31/95

ACCESSION: 95C110

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS RECOVERY (%)
Benzene	30	35	117
Toluene	30	35	117
Ethylbenzene	30	34	113
Total Xylenes	90	106	118

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	03/28/95
SAMPLE ID:	FW-A100705	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-05	MATRIX:	SOIL
% MOISTURE:	16.73	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	60
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	110	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	03/28/95
SAMPLE ID:	FW-A100706	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-06	MATRIX:	SOIL
% MOISTURE:	16.91	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	60
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	105	30-140

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	03/22/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	03/28/95
SAMPLE ID.:	FW-A100801	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-10	MATRIX:	SOIL
% MOISTURE:	17.73	DILUTION FACTOR:	1

PARAMETERS	results (ug/kg)	POL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	109	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/22/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	03/28/95
SAMPLE ID:	FW-A100802	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-11	MATRIX:	SOIL
% MOISTURE:	11.13	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	56
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	106	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

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CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C110	DATE EXTRACTED:	03/28/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-B1S	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	13
Acenaphtylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1,2,3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	111	30-140

=====

PQL: Practical Quantitation Limit



**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: 11.13

BATCH NO.: 95C110 DATE RECEIVED: 03/24/95
 SAMPLE ID: FW-A100802 DATE EXTRACTED: 03/28/95
 CONTROL NO.: C110-11 DATE ANALYZED: 03/31/95

ACCESSION: 95C110

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Naphthalene	ND	113	104	93	113	105	94	1
Phenanthrene	ND	113	112	99	113	114	101	2
Pyrene	ND	113	104	92	113	104	92	2
Benzo(a)pyrene	ND	113	105	93	113	103	92	2

QC LIMIT: 30-140 30-140



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL

BATCH NO.: 95C110 DATE RECEIVED: NA
 SAMPLE ID: LCS17/LCS1D DATE EXTRACTED: 03/28/95
 CONTROL NO.: C110L1S7/1D DATE ANALYZED: 03/31/95

ACCESSION: 95C110

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	LCS CONC (ug/kg)	% LCS REC	SPIKE ADDED (ug/kg)	LCSD CONC (ug/kg)	% LCSD REC	% RPD
Naphthalene	ND	100	103	103	100	106	106	3
Phenanthrene	ND	100	107	107	100	115	115	7
Pyrene	ND	100	101	101	100	106	106	5
Benzo(a)pyrene	ND	100	103	103	100	107	107	4

QC LIMIT: 30-140 30-140



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	03/27/95
SAMPLE ID.:	FW-A100708	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-08	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	115	30-140

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	03/22/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	03/24/95
BATCH NO.:	95C110	DATE EXTRACTED:	03/27/95
SAMPLE ID:	FW-A100804	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-13	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	117	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95C110	DATE EXTRACTED:	03/27/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	03/31/95
CONTROL NO.:	C110-B1W	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	results (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	.25
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	117	30-140

PQL: Practical Quantitation Limit



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: WATER

BATCH NO.: 95C110 DATE RECEIVED: NA
SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 03/27/95
CONTROL NO.: C110L1W/1D DATE ANALYZED: 03/31/95

ACCESSION: 95C110

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	% LCS REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	% LCSD REC	% RPD
Naphthalene	ND	2.00	1.87	94	2.00	1.79	90	4
Phenanthrene	ND	2.00	2.25	113	2.00	2.15	108	5
Pyrene	ND	2.00	2.19	110	2.00	2.53	127	14
Benzo(a)pyrene	ND	2.00	1.87	94	2.00	1.71	86	9

QC LIMIT:

30-140

30-140



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

SDG#95 C110

95C110

Fu 369, d. 92

D2 / WJA2



JACOBS ENGINEERING GROUP INC.
800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 845-8855 FAX (303) 845-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT WORTH					LABORATORY NAME & ADDRESS: CKY INC					
PROJECT NUMBER: 16K70100					630 MAPLE AVE. TORRANCE CA 90503					
WBS CODE:		SUBCONTRACT / D.O. No.								
SAMPLE NUMBER	COLLECTION		SAMPLES INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	O O	CONDITION ON RECEIPT
	DATE	TIME								
Fw-A100701	3/10/95	17:00	mj	1	4oz glass	4°C	S	SW 8020 BTEX		T=2°C _g
Fw-A100702	3/10/95	17:00	mj	2	40ml vials	HCl	W	SW 8020 BTEX		
Fw-A100703	3/10/95	17:00	mj	2	4oz glass					
Fw-A100703	3/10/95	13:10	mj	1	4oz glass	4°C	S	SW 8020 BTEX		
Fw-A100704	3/20/95	18:20	DOS	2	40ml VOA	HCl	W	SW 8020 BTEX		
Fw-A100705	3/21/95	9:07	mj	1	4oz glass	4°C	S	SW 8020 & B310 BTEX & PAH		
Fw-A100706	3/21/95	9:03	mj	1	4oz glass	4°C	S	SW 8020 & B310 BTEX & PAH		
Fw-A100707	3/21/95	17:44	mj	2	40ml vials	HCl	W	SW 8020 BTEX		
Fw-A100708	3/21/95	17:44	mj	1	1L Amber	Na ₂ S ₂ O ₃	W	SW B310 PAH		
COMMENTS:										
COLLECTED & RELEASED BY <i>Michele S. Gobat</i>			DATE 3/21/95	TIME 18:12	TURNAROUND TIME					
RECEIVED BY <i>Michele S. Gobat</i>			DATE 3/21/95	TIME 10:00	RELINQUISHED BY					
RECORD RETURNED BY			DATE 1/1/	TIME 1/1/						
						SHIPPING NUMBER: 4786919756				

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - REFD

SDG #95C110

95C110

Ammonium $\frac{36.9}{10} \frac{104}{(w - A) 1007 / 1008}$ D2



JACOBS ENGINEERING GROUP INC.
800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 565-8455 FAX (303) 565-8457

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

COMMENTS:

COLLECTED & RELEASED BY <i>Dan Sj</i>	DATE 3/25/95	TIME 09:30	TURNAROUND TIME
RECEIVED BY <i>Xopater</i>	DATE 3/24/95	TIME 10:00	RELINQUISHED BY
RECORD RETURNED BY	DATE 1/1	TIME :	
			SHIPPING NUMBER: 47B 6919756

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SDG #95C110

95c110

369 405

D2/WA2



JACOBS ENGINEERING GROUP INC.
800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 565-8855 FAX (303) 565-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT. WORTH					LABORATORY NAME & ADDRESS: CKY INC.					
PROJECT NUMBER: 10K70100					630 MAPLE Ave.					
WBS CODE:		SUBCONTRACT / D.O. No.			Torrance CA		90503			
SAMPLE NUMBER	COLLECTION		SAMPLES INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	O O	CONDITION ON RECEIPT
	DATE	TIME								
FW-A100801	3/22/95	16:10	mj	1	4 oz glass	4°C	S	SW 8020 & 8310 BTEX & PAH		T=2°C ✓
FW-A100802	3/22/95	16:43	mj	1	4 oz glass	4°C	S	SW 8020 & 8310 BTEX & PAH		
FW-A100803	3/22/95	17:43	mj	2	40 ml Vial	HCl	W	SW 8020 BTEX		
FW-A100804	3/22/95	17:43	mj	1	1 L Amber	NasS ₂ O ₃	W	SW 8310 PAH		
FW-A100805	3/23/95	02:18	DNS	2	40 ml VBA	HCl	W	SW 8020 BTEX		
COMMENTS: Line 5 is valid sample. Line was drawn through by mistake										
COLLECTED & RELEASED BY		DATE 3/22/95	TIME 18:11	TURNAROUND TIME						
RECEIVED BY S. Pachal		DATE 3/24/95	TIME 10:00	RELINQUISHED BY			DATE 1/1	TIME :		
RECORD RETURNED BY		DATE 1/1	TIME :							
								SHIPPING NUMBER: 4786919756		

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SAMPLE RECEIPT FORM

SAMPLE RECEIPT FORM									
DATE	03 - 24 - 95								
TIME	10 : 00								
RECIPIENT	I. PATEL								
CONTROL NO.	CLIENT	PROJECT	ON(DATE)	AT(TIME)	FROM(SITE/CO.)	COMMENTS	ON(DATE)	AT(TIME)	FROM(SITE/CO.)
95CB-115	JACOB'S ENGR.	NAS FT. WORTH	BY						
SAMPLE TRANSPORTATION TO CKY LABORATORY:									
PICKED-UP BY CKY COURIER									
DELIVERED BY CLIENT									
SHIPPED/AIRBILL NO P#D# & APTN: 4786919756 SEE AIRBILL									
SAMPLE BATCH PACKAGING/SEALING UPON RECEIPT:									
CONTAINER:	INSIDE TEMPERATURE:	NO CONTAINER	INTACT	DAMAGED	NOT SEALED	/ SEALED	LOCATION	NUMBER	
✓ COOLER	20 C	SUFFICIENCY	INTACT	DAMAGED	FRONT CLOSURE	1			
BOX	PACKAGING TYPE	OTC	NAME: SEE L.C.	NAME: SEE L.C.	REAR CLOSURE	1			
OTHER:	INSULATION:	RECEIVED	DATE:	DATE:					
	ICE/COOLANT:	STYROFOAM	TIME:	TIME:					
SAMPLE DOCUMENTATION/CHAIN-OF-CUSTODY(COC)									
SAMPLE LOG-IN:	CRITERIA	DISCREPANCY							
SAMPLE CUSTODY SEAL	EVERY SAMPLE	NO NO							
CONTAINER TYPE/MATERIAL	APPROPRIATE	OTC							
SAMPLE AMOUNT	ENOUGH								
SAMPLE PRESERVATION/HOLDING TIME	SUFFICIENT								
HEADSPACE/BUBBLES	ZERO/NONE								
SAMPLE LABEL INFORMATION	SUFFICIENT	SEE BELOW							
CHAIN-OF-CUSTODY INFORMATION	SUFFICIENT								
SAMPLE INFO:	DATE	TIME	SIGNATURE	ANALYSES	PRESERVATIVE	CONTAINER			
INDIVIDUAL SAMPLE CONTAINER:	NONE	PLASTIC BAG	CAN	OTHER(SPECIFY):	SEALED				ACTION
DISCREPANCY									
SAMPLE NUMBER	CLIENT ID	DID NOT REC'D BUT REC'D SAMPLES TO REC'D							
-4	FWA100806	W/ ID# AS FWJ-A100704 (2 VIALS)							
Will be forwarded to Lab.									
3/18 Pending									
Signature 3/27 DATE									
TIME									

Date: 05-16-1995
CKY Batch No.: 95D065

CKY incorporated Analytical Laboratories

Attn: Lynn Schuetter

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

RECEIVED

Subject: Laboratory Report
Project: NAS FORT WORTH 10-K701-00

L-10

Enclosed is the Laboratory report for samples received on 04/15/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include:

Sample ID	Control No.	Matrix	Analysis
FW-A100901	D065-01	Soil	EPA 8020
FW-A100902	D065-02	Water	EPA 8020
FW-A100903	D065-03	Soil	EPA 8020
FW-A100904	D065-04	Soil	EPA 8310
FW-A100905	D065-05	Soil	EPA 8020
FW-A100906	D065-06	Water	EPA 8310
FW-A100907	D065-07	Water	EPA 8020
FW-A100908	D065-08	Soil	EPA 8020
FW-A100909	D065-09	Soil	EPA 8020
FW-A101001	D065-10	Soil	EPA 8020
FW-A101002	D065-11	Soil	EPA 8020
FW-A101003	D065-12	Water	EPA 8020
FW-A101004	D065-13	Water	EPA 8310
FW-A101005	D065-14	Soil	EPA 8020
FW-A101006	D065-15	Soil	EPA 8020
FW-A101007	D065-16	Soil	EPA 8310
FW-A101008	D065-17	Water	EPA 8020
FW-A101101	D065-18	Water	EPA 8020
FW-A101102	D065-19	Water	EPA 8310

The results are summarized on the following pages.

All PNA results are confirmed by GC/MS.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc DATE COLLECTED: 04/11/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A100901 DATE ANALYZED: 04/24/95
CONTROL NO.: D065-01 MATRIX: SOIL
% MOISTURE: 10.41 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.6

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	84	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/12/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A100903 DATE ANALYZED: 04/25/95
CONTROL NO.: D065-03 MATRIX: SOIL
% MOISTURE: 10.96 DILUTION FACTOR: 250

=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Benzene	ND	562
Toluene	620	562
Ethylbenzene	ND	562
Total Xylenes	2200	1404
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	109	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc DATE COLLECTED: 04/12/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A100904 DATE ANALYZED: 04/25/95
CONTROL NO.: D065-04 MATRIX: SOIL
% MOISTURE: 14.06 DILUTION FACTOR: 100
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	233
Toluene	260	233
Ethylbenzene	270	233
Total Xylenes	1050	582
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	115	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	04/12/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100905	DATE ANALYZED:	04/25/95
CONTROL NO.:	D065-05	MATRIX:	SOIL
% MOISTURE:	14.92	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	5.9

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	78	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/13/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: NA
 SAMPLE ID: FW-A100908 DATE ANALYZED: 04/25/95
 CONTROL NO.: D065-08 MATRIX: SOIL
 % MOISTURE: 16.72 DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	85	47-135

=====
 PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/13/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100909	DATE ANALYZED:	04/25/95
CONTROL NO.:	D065-09	MATRIX:	SOIL
% MOISTURE:	15.21	DILUTION FACTOR:	5

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	12	12
Toluene	ND	12
Ethylbenzene	140	12
Total Xylenes	830	29
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
Bromofluorobenzene	105	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering Inc DATE COLLECTED: 04/13/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: NA
 SAMPLE ID: FW-A101001 DATE ANALYZED: 04/25/95
 CONTROL NO.: D065-10 MATRIX: SOIL
 % MOISTURE: 11.66 DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.3
Toluene	4.6	2.3
Ethylbenzene	2.3	2.3
Total Xylenes	18	5.7
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	105	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 04/13/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A101002 DATE ANALYZED: 04/25/95
CONTROL NO.: D065-11 MATRIX: SOIL
% MOISTURE: 14.17 DILUTION FACTOR: 500

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	2900	1165
Toluene	3600	1165
Ethylbenzene	4500	1165
Total Xylenes	2900	2913
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	118	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: 04/14/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: NA
 SAMPLE ID: FW-A101005 DATE ANALYZED: 04/25/95
 CONTROL NO.: D065-14 MATRIX: SOIL
 % MOISTURE: 15.21 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	5.9
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	67	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 04/14/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A101006 DATE ANALYZED: 04/25/95
CONTROL NO.: D065-15 MATRIX: SOIL
% MOISTURE: 14.29 DILUTION FACTOR: 100

=====

PARAMETERS	results (ug/kg)	PQL (ug/Kg)
Benzene	ND	233
Toluene	120	233
Ethylbenzene	330	233
Total Xylenes	980	583
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	103	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	04/14/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A101007	DATE ANALYZED:	04/27/95
CONTROL NO.:	D065-16	MATRIX:	SOIL
% MOISTURE:	14.49	DILUTION FACTOR:	100

=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Benzene	ND	234
Toluene	ND	234
Ethylbenzene	ND	234
Total Xylenes	980	585

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	113	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95D065	DATE EXTRACTED:	NA
SAMPLE ID:	VBLK01	DATE ANALYZED:	04/24/95
CONTROL NO.:	DVBLK31	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	94	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: VBLK02 DATE ANALYZED: 04/25/95
CONTROL NO.: DVBLK32 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1
=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: VBLK03 DATE ANALYZED: 04/25/95
CONTROL NO.: DVBLK32 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	80	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: VBLK04 DATE ANALYZED: 04/27/95
CONTROL NO.: DVBLK32 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/Kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: SOIL
 % MOISTURE: 10.41

BATCH NO.: 95D065 DATE RECEIVED: 04/15/95
 SAMPLE ID: FW-A100901 DATE EXTRACTED: NA
 CONTROL NO.: D065-01 DATE ANALYZED: 04/24/95

ACCESSION: 95D065 95D080

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Benzene	ND	33.49	34.60	103	33.49	32.37	97	7
Toluene	ND	33.49	29.02	87	33.49	27.90	83	4
Ethylbenzene	ND	33.49	30.14	90	33.49	29.02	87	4
Xylenes	ND	100	90	90	100	86	86	5

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129



**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: SOIL
 % MOISTURE: 16.72

BATCH NO.: 95D065 DATE RECEIVED: 04/15/95
 SAMPLE ID: FW-A100908 DATE EXTRACTED: NA
 CONTROL NO.: D065-08 DATE ANALYZED: 04/25/95
 ACCESSION: 95D065

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Benzene	ND	36.02	34.82	97	36.02	39.63	110	13
Toluene	ND	36.02	31.22	87	36.02	34.82	97	11
Ethylbenzene	ND	36.02	32.42	90	36.02	36.02	100	11
Xylenes	ND	108	100	92	108	101	93	1

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: SOIL
% MOISTURE: NA

BATCH NO.: 95D065 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: DVLCs28 DATE ANALYZED: 04/24/95

ACCESSION: 95D065 95D080 95D081

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	30.00	33.00		110
Toluene	30.00	30.00		100
Ethylbenzene	30.00	31.00		103
Xylenes	90.00	93.00		103

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: SOIL
% MOISTURE: NA

BATCH NO.: 95D065 DATE RECEIVED: NA
SAMPLE ID: LCS2 DATE EXTRACTED: NA
CONTROL NO.: D065-L2S DATE ANALYZED: 04/25/95
ACCESSION: 95D065

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	30.00	33.00		110
Toluene	30.00	29.00		97
Ethylbenzene	30.00	31.00		103
Xylenes	90.00	93.00		103

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: SOIL
% MOISTURE: NA

BATCH NO.: 95D065 DATE RECEIVED: NA
SAMPLE ID: LCS3 DATE EXTRACTED: NA
CONTROL NO.: D065-L3S DATE ANALYZED: 04/25/95

ACCESSION: 95D065

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS RECOVERY (%)
Benzene	30.00	32.00	107
Toluene	30.00	28.00	93
Ethylbenzene	30.00	29.00	97
Xylenes	90.00	89.00	99

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: SOIL
 % MOISTURE: NA

BATCH NO.: 95D065 DATE RECEIVED: NA
 SAMPLE ID: LCS4 DATE EXTRACTED: NA
 CONTROL NO.: D065-L4S DATE ANALYZED: 04/27/95

ACCESSION: 95D065 95D080

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	30.00	33.00		110
Toluene	30.00	29.00		97
Ethylbenzene	30.00	30.00		100
Xylenes	90.00	89.00		101

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	04/11/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A100902	DATE ANALYZED:	04/25/95
CONTROL NO.:	D065-02	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	110	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: 04/12/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A100907 DATE ANALYZED: 04/25/95
CONTROL NO.: D065-07 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	109	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc. DATE COLLECTED: 04/13/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A101003 DATE ANALYZED: 04/25/95
CONTROL NO.: D065-12 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	112	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	04/14/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A101008	DATE ANALYZED:	04/25/95
CONTROL NO.:	D065-17	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	108	68-120

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: 04/14/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: FW-A101101 DATE ANALYZED: 04/25/95
CONTROL NO.: D065-18 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	100	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
 BATCH NO.: 95D065 DATE EXTRACTED: NA
 SAMPLE ID: VBLK01 DATE ANALYZED: 04/25/95
 CONTROL NO.: DVBLK32 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	68-120

=====
 PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D065 DATE EXTRACTED: NA
SAMPLE ID: VBLK02 DATE ANALYZED: 04/25/95
CONTROL NO.: DVBLK32 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	80	68-120

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: WATER

BATCH NO.: 95D065 DATE RECEIVED: 04/15/95
 SAMPLE ID: FW-A100902 DATE EXTRACTED: NA
 CONTROL NO.: D065-02 DATE ANALYZED: 04/25/95

ACCESSION: 95D065

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	% REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	% REC	% RPD
Benzene	ND	30.00	33.00	110	30.00	32.00	107	3
Toluene	ND	30.00	28.00	97	30.00	28.00	93	4
Ethylbenzene	ND	30.00	30.00	100	30.00	30.00	100	0
Xylenes	ND	90.00	92.00	102	90.00	89.00	99	3

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: WATER

BATCH NO.: 95D065 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: D065-L1W DATE ANALYZED: 04/25/95

ACCESSION: 95D065

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS RECOVERY (%)
Benzene	30.00	33.00	110
Toluene	30.00	29.00	97
Ethylbenzene	30.00	31.00	103
Xylenes	90.00	93.00	103

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: WATER

BATCH NO.:	95D065	DATE RECEIVED:	NA
SAMPLE ID.:	LCS ²	DATE EXTRACTED:	NA
CONTROL NO.:	D065-L2W	DATE ANALYZED:	04/25/95

ACCESSION: 95D065

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	30.00	30.00		100
Toluene	30.00	28.00		93
Ethylbenzene	30.00	29.00		97
Xylenes	90.00	88.00		98

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering Inc.	DATE COLLECTED:	04/12/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	04/20/95
SAMPLE ID:	FW-A100903	DATE ANALYZED:	04/27/95
CONTROL NO.:	D065-03	MATRIX:	SOIL
% MOISTURE:	10.96	DILUTION FACTOR:	10

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Acenaphthene	ND	146
Acenaphtylene	ND~	56
Anthracene	ND	146
Benzo(a)anthracene	ND	146
Benzo(b)fluoranthene	ND	146
Benzo(k)fluoranthene	ND	146
Benzo(g,h,i)perylene	ND	146
Benzo(a)pyrene	ND	146
Chrysene	ND	146
Dibenz(a,h)anthracene	ND	146
Fluoranthene	ND	146
Fluorene	ND	146
Indeno(1,2,3-cd)pyrene	ND	146
Naphthalene	2800	146
Phenanthrene	ND	146
Pyrene	ND	146
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	87	30-140

PQL: Practical Quantitation Limit

~ : Dilution factor = 1, from UV detector on 04/26/95

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc	DATE COLLECTED:	04/12/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	04/20/95
SAMPLE ID:	FW-A100904	DATE ANALYZED:	04/27/95
CONTROL NO.:	D065-04	MATRIX:	SOIL
% MOISTURE:	14.06	DILUTION FACTOR:	5

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	76
Acenaphtylene	ND~	50
Anthracene	ND	76
Benzo(a)anthracene	ND	76
Benzo(b)fluoranthene	ND	76
Benzo(k)fluoranthene	ND	76
Benzo(g,h,i)perylene	ND	76
Benzo(a)pyrene	ND	76
Chrysene	ND	76
Dibenzo(a,h)anthracene	ND	76
Fluoranthene	ND	76
Fluorene	ND	76
Indeno(1,2,3-cd)pyrene	ND	76
Naphthalene	650	76
Phenanthrene	ND	76
Pyrene	ND	76
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	75	30-140

PQL: Practical Quantitation Limit
 ~ Dilution factor = 1, from UV detector on 04/26/95

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering Inc DATE COLLECTED: 04/13/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: 04/20/95
 SAMPLE ID: FW-A100909 DATE ANALYZED: 04/27/95
 CONTROL NO.: D065-09 MATRIX: SOIL
 % MOISTURE: 15.21 DILUTION FACTOR: 10
 =====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	153
Acenaphtylene	ND~	59
Anthracene	ND	153
Benzo(a)anthracene	ND	153
Benzo(b)fluoranthene	ND	153
Benzo(k)fluoranthene	ND	153
Benzo(g,h,i)perylene	ND	153
Benzo(a)pyrene	ND	153
Chrysene	ND	153
Dibenz(a,h)anthracene	ND	153
Fluoranthene	ND	153
Fluorene	ND	153
Indeno(1,2,3-cd)pyrene	ND	153
Naphthalene	1100	153
Phenanthrene	ND	153
Pyrene	ND	153
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	80	30-140

=====
 PQL: Practical Quantitation Limit
 ~ : Dilution factor = 1, from UV detector on 04/26/95
 =====

POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT: Jacobs Engineering Inc DATE COLLECTED: 04/13/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: 04/20/95
 SAMPLE ID: FW-A101002 DATE ANALYZED: 04/27/95
 CONTROL NO.: D065-11 MATRIX: SOIL
 % MOISTURE: 14.17 DILUTION FACTOR: 50

=====

PARAMETERS	RESULTS (ug/kg)	POL (ug/kg)
Acenaphthene	ND	757
Acenaphthylene	ND~	58
Anthracene	ND	757
Benzo(a)anthracene	ND	757
Benzo(b)fluoranthene	ND	757
Benzo(k)fluoranthene	ND	757
Benzo(g,h,i)perylene	ND	757
Benzo(a)pyrene	ND	757
Chrysene	ND	757
Dibenz(a,h)anthracene	ND	757
Fluoranthene	ND	757
Fluorene	ND	757
Indeno(1,2,3-cd)pyrene	ND	757
Naphthalene	11000	757
Phenanthrene	ND	757
Pyrene	ND	757
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	DO	30-140

=====

POL: Practical Quantitation Limit

DO: Diluted out

~: Dilution factor = 1, from UV detector on 04/26/95

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	04/14/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	04/20/95
SAMPLE ID:	FW-A101006	DATE ANALYZED:	04/27/95
CONTROL NO.:	D065-15	MATRIX:	SOIL
% MOISTURE:	14.29	DILUTION FACTOR:	10

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	152
Acenaphthylene	ND~	58
Anthracene	ND	152
Benzo(a)anthracene	ND	152
Benzo(b)fluoranthene	ND	152
Benzo(k)fluoranthene	ND	152
Benzo(g,h,i)perylene	ND	152
Benzo(a)pyrene	ND	152
Chrysene	ND	152
Dibenzo(a,h)anthracene	ND	152
Fluoranthene	ND	152
Fluorene	ND	152
Indeno(1,2,3-cd)pyrene	ND	152
Naphthalene	660	152
Phenanthrene	ND	152
Pyrene	ND	152
<hr/>		
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	83	30-140

=====

PQL: Practical Quantitation Limit
~ : Dilution factor = 1, from UV detector on 04/26/95

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering Inc DATE COLLECTED: 04/14/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: 04/20/95
 SAMPLE ID: FW-A101007 DATE ANALYZED: 04/27/95
 CONTROL NO.: D065-16 MATRIX: SOIL
 % MOISTURE: 14.49 DILUTION FACTOR: 5
 =====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	76
Acenaphtylene	ND~	58
Anthracene	ND	76
Benzo(a)anthracene	ND	76
Benzo(b)fluoranthene	ND	76
Benzo(k)fluoranthene	ND	76
Benzo(g,h,i)perylene	ND	76
Benzo(a)pyrene	ND	76
Chrysene	ND	76
Dibenzo(a,h)anthracene	ND	76
Fluoranthene	ND	76
Fluorene	ND	76
Indeno(1,2,3-cd)pyrene	ND	76
Naphthalene	390	76
Phenanthrene	ND	76
Pyrene	ND	76
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	86	30-140

PQL: Practical Quantitation Limit
 ~ : Dilution factor = 1, from UV detector on 04/26/95



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95D065	DATE EXTRACTED:	04/20/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	04/27/95
CONTROL NO.:	D065-B1S	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	13
Acenaphthylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1,2,3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	94	30-140

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: 14.49

BATCH NO.: 95D065 DATE RECEIVED: 04/15/95
 SAMPLE ID: FW-A101007 DATE EXTRACTED: 04/20/95
 CONTROL NO.: D065-16 DATE ANALYZED: 04/27/95

ACCESSION: 95D065

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Naphthalene	456	117	327	NA	117	269	NA	NA
Phenanthrene	ND	117	585	NA	117	491	NA	NA
Pyrene	ND	117	125	107	117	106	91	17
Benzo(a)pyrene	ND	117	75	64	117	75	64	0

QC LIMIT: 30-140
 NA : Not applicable due to matrix interference

30-140



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: NA

BATCH NO.: 95D065 DATE RECEIVED: NA
 SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 04/20/95
 CONTROL NO.: D065-L1S71D DATE ANALYZED: 04/27/95

ACCESSION: 95D065

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	LCS CONC (ug/kg)	% LCS REC	SPIKE ADDED (ug/kg)	LCSD CONC (ug/kg)	% LCSD REC	% RPD
Naphthalene	ND	100	89	89	100	86	86	3
Phenanthrene	ND	100	99	99	100	94	94	5
Pyrene	ND	100	89	89	100	85	85	3
Benzo(a)pyrene	ND	100	75	75	100	72	72	3
QC LIMIT:				30-140			30-140	



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/12/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	04/19/95
SAMPLE ID:	FW-A100906	DATE ANALYZED:	04/26/95
CONTROL NO.:	D065-06	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	.1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenz(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	98	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/12/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: 04/19/95
 SAMPLE ID: FW-A100906 DATE ANALYZED: 04/26/95
 CONTROL NO.: D065-06 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphthylene	ND	.1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenz(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	98	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc DATE COLLECTED: 04/13/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/15/95
 BATCH NO.: 95D065 DATE EXTRACTED: 04/19/95
 SAMPLE ID: FW-A101004 DATE ANALYZED: 04/26/95
 CONTROL NO.: D065-13 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1
 =====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	.1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	106	30-140

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc	DATE COLLECTED:	04/14/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/15/95
BATCH NO.:	95D065	DATE EXTRACTED:	04/19/95
SAMPLE ID:	FW-A101102	DATE ANALYZED:	04/26/95
CONTROL NO.:	D065-19	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	.1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	105	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering Inc	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95D065	DATE EXTRACTED:	04/19/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	04/26/95
CONTROL NO.:	D065-B1W	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	99	30-140

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: WATER

BATCH NO.: 95D065 DATE RECEIVED: NA
 SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 04/19/95
 CONTROL NO.: D065-L1W/1D DATE ANALYZED: 04/26/95

ACCESSION: 95D065

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	% LCS REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	% LCSD REC	% RPD
Naphthalene	ND	2.00	1.18	59	2.00	1.24	62	5
Phenanthrene	ND	2.00	1.35	68	2.00	1.54	77	13
Pyrene	ND	2.00	1.44	72	2.00	1.26	63	13
Benz(a)pyrene	ND	2.00	1.45	73	2.00	1.27	64	13

QC LIMIT: 30-140 30-140





SDG #95D065
JACOBS ENGINEERING GROUP INC. 95D065
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595-8855 FAX (303) 595-8857

FW-A1009 ES/R6A3

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:					LABORATORY NAME & ADDRESS:			
PROJECT NUMBER:					630 MAPLE AVE			
WBS CODE:		SUBCONTRACT / D.O. NO.			TOPRANCE CA			
SAMPLE NUMBER	COLLECTION DATE	TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED
1 FW-A100901	4/11/95	9:22	mj	1	4 oz glass	4°C	S	BTEX SW-8200
2 FW-A100902	4/11/95	10:35	mj	2	40 ml vial	HCl	W	BTEX SW - 8200
3 FW-A100903	4/12/95	8:30	mj	1	4 oz glass	4°C	S	BTEX SW 8200 PAH SW-8310
4 FW-A100904	4/12/95	14:29	mj	1	4 oz glass	4°C	S	BTEX SW-8200 PAH SW-8310
5 FW-A100905	4/12/95	16:53	mj	1	11 oz glass	4°C	S	BTEX SW 8200
6 FW-A100906	4/12/95	18:22	mj	1	12 Amber	NH ₃ , O ₃	W	PAH SW 8310
7 FW-A100907	4/12/95	18:22	mj	2	40ml vial	HCl	W	BTEX SW 8200
8 FW-A100908	4/13/95	9:11	mj	1	4 oz glass	4°C	S	BTEX SW 8200
9 FW-A100909	4/13/95	9:30	mj	1	4 oz glass	4°C	S	SW 8200, SW 8310 BTEX, PAH

COMMENTS:

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME		
Dan Sq	4/14/95	18:44			
RECEIVED BY	DATE	TIME	RELINQUISHED BY	DATE	TIME
<i>J. Stel</i>	4/18/95	10:15			
RECORD RETURNED BY	DATE	TIME	SHIPPING NUMBER:	478690 5443	

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



SDG # 95D065
JACOBS ENGINEERING GROUP INC.
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 585 - 8856 FAX (303) 585 - 8857

95D065

FW-A1010

ES/RGA3

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT WORTH					LABORATORY NAME & ADDRESS: CKY INC.					
PROJECT NUMBER: 101C70100			SUBCONTRACT / D.O. No.			630 MAPLE AVE				
WBS CODE:						Torrance CA				
SAMPLE NUMBER	COLLECTION DATE	TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINED SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QTY	CONDITION ON RECEIPT
10 101001	4/13/95	14:16	mj	1	402 glass	4C	S	SW 8020 BTX		T=5°C
11 101002	4/13/95	14:47	mj	1	402 glass	4C	S	SW 8020 BTX		
12 101003	4/13/95	18:29	mj	2	40ml vial	HCl	W	SW 8020 BTX		
13 101004	4/13/95	18:29	mj	1	1L Amber	NH ₄ S ₂ O ₃	W	SW 8310 PAH		
14 101005	4/14/95	9:13	mj	1	402 glass	4C	S	SW 8020 BTX		
15 101006	4/14/95	10:45	mj	1	402 glass	4C	S	SW 8020 BTX		
16 101007	4/14/95	12:06	mj	1	402 glass	4C	S	SW 8310 PAH		
17 101008	4/14/95	17:55	DDS	2	40ml VOA HCl	W	SW 8020 BTX			
								DDS		

COMMENTS:

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME		
<i>John Pate</i>	4/14/95	14:00			
RECEIVED BY	DATE	TIME	RELINQUISHED BY	DATE	TIME
<i>John Pate</i>	4/15/95	10:15			
RECORD RETURNED BY	DATE	TIME			
	11	:			
SHIPPING NUMBER:			4786905443		

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



SDG #95D065
JACOBS ENGINEERING GROUP INC.
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595-8855 FAX (303) 595-8857

95D065 FW-A1011

E5/R6A3

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>NAS FT WORTH</i>					LABORATORY NAME & ADDRESS: <i>CKY INC.</i>						
PROJECT NUMBER: <i>10K70100</i>					<i>630 MAPLE Ave</i>						
WBS CODE:		SUBCONTRACT / D.O. No.			<i>TORRANCE CA</i>						
SAMPLE NUMBER	COLLECTION		SAMPLE'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED		Q Q	CONDITION ON RECEIPT
	DATE	TIME									
18	<i>FW-A 10/11/01</i>	<i>4/14/95 1836</i>	<i>mj</i>	<i>2</i>	<i>40 ml Vial</i>	<i>HCl</i>	<i>W</i>	<i>SW 8020 BTEX</i>		<i>T = 5°C</i>	
19	<i>FW-A 10/11/02</i>	<i>4/14/95 1836</i>	<i>mj</i>	<i>1</i>	<i>16 Ambar</i>	<i>CH₂S₂ O₃</i>	<i>W</i>	<i>SW 8310 PAH</i>		<i>↓</i>	
<i>DDS</i>											

COMMENTS:

COLLECTED & RELEASED BY <i>[Signature]</i>	DATE <i>4/14/95</i>	TIME <i>18:46</i>	TURNAROUND TIME
RECEIVED BY <i>[Signature]</i>	DATE <i>4/15/95</i>	TIME <i>18:45</i>	RELINQUISHED BY
RECORD RETURNED BY	DATE <i>1/1</i>	TIME <i>:</i>	
			SHIPPING NUMBER: <i>4786905443</i>

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



CKY incorporated
Analytical Laboratories

Date: 05-22-1995
CKY Batch No.: 95D107

Attn: Lynn Schuetter

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

Subject: Laboratory Report
Project: NAS FORT WORTH 10-K701-00

Enclosed is the Laboratory report for samples received on 04/22/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

Sample ID	Control No.	Matrix	Analysis
FW-A101201	D107-01	Soil	EPA 8020 EPA 8310
FW-A101202	D107-02	Soil	EPA 8020 EPA 8310
FW-A101203	D107-03	Soil	EPA 8020 EPA 8310
FW-A101204	D107-04	Water	EPA 602
FW-A101205	D107-05	Water	EPA 8310
FW-A101206	D107-06	Soil	EPA 8020 EPA 8310
FW-A101207	D107-07	Soil	EPA 8020
FW-A101208	D107-08	Water	EPA 602
FW-A101209	D107-09	Water	EPA 8310
FW-A101401	D107-10	Water	EPA 602

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: FW-A101201 DATE ANALYZED: 04/27/95
CONTROL NO.: D107-01 MATRIX: SOIL
% MOISTURE: 17.26 DILUTION FACTOR: 50

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	280	121
Toluene	1300	121
Ethylbenzene	280	121
Total Xylenes	1300	302
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	118	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: FW-A101202 DATE ANALYZED: 04/27/95
CONTROL NO.: D107-02 MATRIX: SOIL
% MOISTURE: 20.31 DILUTION FACTOR: 500

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	2200	1255
Toluene	8500	1255
Ethylbenzene	8800	1255
Total Xylenes	36000	3137

SURROGATE PARAMETER % RECOVERY QC LIMIT

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	112	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: FW-A101203 DATE ANALYZED: 04/27/95
CONTROL NO.: D107-03 MATRIX: SOIL
% MOISTURE: 14.29 DILUTION FACTOR: 5000
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	260000~	4667
Toluene	ND	11667
Ethylbenzene	ND	11667
Total Xylenes	ND	29168
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	110	47-135

=====

PQL: Practical Quantitation Limit

~ : Dilution factor, 2000

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/19/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: FW-A101206 DATE ANALYZED: 04/27/95
CONTROL NO.: D107-06 MATRIX: SOIL
% MOISTURE: 16.78 DILUTION FACTOR: 50

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	120
Toluene	130	120
Ethylbenzene	230	120
Total Xylenes	1400	300
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	112	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/20/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
 BATCH NO.: 95D107 DATE EXTRACTED: NA
 SAMPLE ID: FW-A101207 DATE ANALYZED: 04/27/95
 CONTROL NO.: D107-07 MATRIX: SOIL
 % MOISTURE: 19.62 DILUTION FACTOR: 50
 =====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	124
Toluene	ND	124
Ethylbenzene	160	124
Total Xylenes	880	311

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	111	47-135

=====
 PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 04/27/95
CONTROL NO.: DVBLK32 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit

**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: SOIL

BATCH NO.: 95D107 DATE RECEIVED: 04/22/95
 SAMPLE ID: FW-A101202 DATE EXTRACTED: NA
 CONTROL NO.: D107-02 DATE ANALYZED: 04/27/95

ACCESSION: 95D107 95D080 95D065

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	MS % REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	MSD % REC	% RPD
Benzene	2200	18750	24200	117	18750	23500	114	3
Toluene	8500	18750	19100	57	18750	18000	51	11
Ethylbenzene	8800	18750	27100	98	18750	27000	97	1
Xylenes	36000	56250	93000	101	56250	93000	101	0

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: WATER

BATCH NO.: 95D107 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: DVLCS32 DATE ANALYZED: 04/27/95

ACCESSION: 95D107

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS RECOVERY (%)
Benzene	30.00	33.00	110
Toluene	30.00	29.00	97
Ethylbenzene	30.00	30.00	100
Xylenes	90.00	90.00	100

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: FW-A101204 DATE ANALYZED: 04/26/95
CONTROL NO.: D107-04 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	94	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/20/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: FW-A101208 DATE ANALYZED: 04/26/95
CONTROL NO.: D107-08 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	POL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	114	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/22/95
BATCH NO.:	95D107	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A101401	DATE ANALYZED:	04/26/95
CONTROL NO.:	D107-10	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	104	68-120

=====

PQL: Practical Quantitation Limit

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1 E 9

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D107 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 04/26/95
CONTROL NO.: DVBLK32 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	102	68-120

=====

PQL: Practical Quantitation Limit

CKY

CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: WATER

BATCH NO.: 95D107 DATE RECEIVED: 04/22/95
 SAMPLE ID: FW-A101401 DATE EXTRACTED: NA
 CONTROL NO.: D107-10 DATE ANALYZED: 04/26/95
 ACCESSION: 95D107

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	MS % REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	MSD % REC	% RPD
Benzene	ND	30.00	34.00	113	30.00	33.00	110	3
Toluene	ND	30.00	30.00	100	30.00	29.00	97	3
Ethylbenzene	ND	30.00	31.00	103	30.00	30.00	100	3
Xylenes	ND	90.00	93.00	103	90.00	90.00	100	3

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: WATER

BATCH NO.:	95D107	DATE RECEIVED:	NA
SAMPLE ID:	LCS1	DATE EXTRACTED:	NA
CONTROL NO.:	DVLCS31	DATE ANALYZED:	04/26/95

ACCESSION: 95D107

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	30.00	31.00		103
Toluene	30.00	28.00		93
Ethylbenzene	30.00	30.00		100
Xylenes	90.00	92.00		102

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: 04/27/95
SAMPLE ID: FW-A101201 DATE ANALYZED: 04/28/95
CONTROL NO.: D107-01 MATRIX: SOIL
% MOISTURE: 17.26 DILUTION FACTOR: 2

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	31
Acenaphtylene	ND	121
Anthracene	ND	31
Benzo(a)anthracene	ND	31
Benzo(b)fluoranthene	ND	31
Benzo(k)fluoranthene	ND	31
Benzo(g,h,i)perylene	ND	31
Benzo(a)pyrene	ND	31
Chrysene	ND	31
Dibenzo(a,h)anthracene	ND	31
Fluoranthene	ND	31
Fluorene	ND	31
Indeno(1,2,3-cd)pyrene	ND	31
Naphthalene	ND	31
Phenanthrene	ND	31
Pyrene	ND	31
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	86	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/18/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/22/95
BATCH NO.:	95D107	DATE EXTRACTED:	04/27/95
SAMPLE ID:	FW-A101202	DATE ANALYZED:	05/03/95
CONTROL NO.:	D107-02	MATRIX:	SOIL
% MOISTURE:	20.31	DILUTION FACTOR:	10

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	163
Acenaphtylene	ND~	63
Anthracene	ND	163
Benzo(a)anthracene	ND	163
Benzo(b)fluoranthene	ND	163
Benzo(k)fluoranthene	ND	163
Benzo(g,h,i)perylene	ND	163
Benzo(a)pyrene	ND	163
Chrysene	ND	163
Dibenzo(a,h)anthracene	ND	163
Fluoranthene	ND	163
Fluorene	ND	163
Indeno(1,2,3-cd)pyrene	ND	163
Naphthalene	ND	163
Phenanthrene	ND	163
Pyrene	ND	163
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	77	30-140

PQL: Practical Quantitation Limit
~ : Dilution factor = 1, from UV detector on 04/28/95

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/18/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/22/95
BATCH NO.:	95D107	DATE EXTRACTED:	04/27/95
SAMPLE ID:	FW-A101203	DATE ANALYZED:	04/28/95
CONTROL NO.:	D107-03	MATRIX:	SOIL
% MOISTURE:	14.29	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	58
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	103	30-140

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/19/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/22/95
BATCH NO.:	95D107	DATE EXTRACTED:	04/27/95
SAMPLE ID:	FW-A101206	DATE ANALYZED:	05/03/95
CONTROL NO.:	D107-06	MATRIX:	SOIL
% MOISTURE:	16.78	DILUTION FACTOR:	10

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	156
Acenaphtylene	ND~	60
Anthracene	ND	156
Benzo(a)anthracene	ND	156
Benzo(b)fluoranthene	ND	156
Benzo(k)fluoranthene	ND	156
Benzo(g,h,i)perylene	ND	156
Benzo(a)pyrene	ND	156
Chrysene	ND	156
Dibenzo(a,h)anthracene	ND	156
Fluoranthene	ND	156
Fluorene	ND	156
Indeno(1,2,3-cd)pyrene	ND	156
Naphthalene	ND	156
Phenanthrene	ND	156
Pyrene	ND	156
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	79	30-140

PQL: Practical Quantitation Limit
~ : Dilution factor = 1, from UV detector on 04/28/95

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95D107	DATE EXTRACTED:	04/27/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	04/28/95
CONTROL NO.:	D107-B1S	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	13
Acenaphtylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1,2,3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	98	30-140

PQL: Practical Quantitation Limit

**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: 17.26

BATCH NO.: 95D107 DATE RECEIVED: 04/22/95
 SAMPLE ID: FW-A101201 DATE EXTRACTED: 04/27/95
 CONTROL NO.: D107-01 DATE ANALYZED: 04/28/95

ACCESSION: 95D107

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Naphthalene	ND	242	232	96	242	223	92	4
Phénanthrene	ND	242	292	121	242	254	105	14
Pyrene	ND	242	263	109	242	256	106	3
Benzo(a)pyrene	ND	242	195	81	242	187	78	4
QC LIMIT:			30-140			30-140		



**CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: SOIL

BATCH NO.: 95D107 DATE RECEIVED: NA
 SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 04/27/95
 CONTROL NO.: D107-L1S/1D DATE ANALYZED: 04/28/95

ACCESSION: 95D107

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	LCS CONC (ug/kg)	LCS % REC	SPIKE ADDED (ug/kg)	LCSD CONC (ug/kg)	LCSD % REC	% RPD
Naphthalene	ND	100	94	94	100	96	96	1
Phenanthrene	ND	100	101	101	100	101	101	0
Pyrene	ND	100	92	92	100	95	95	3
Benzo(a)pyrene	ND	100	85	85	100	85	85	0

QC LIMIT: 30-140 30-140

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/18/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/22/95
BATCH NO.: 95D107 DATE EXTRACTED: 04/26/95
SAMPLE ID: FW-A101205 DATE ANALYZED: 04/28/95
CONTROL NO.: D107-05 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	106	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/20/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/22/95
BATCH NO.:	95D107	DATE EXTRACTED:	04/26/95
SAMPLE ID:	FW-A101209	DATE ANALYZED:	04/28/95
CONTROL NO.:	D107-09	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	106	30-140

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
 BATCH NO.: 95D107 DATE EXTRACTED: 04/26/95
 SAMPLE ID: PBLK01 DATE ANALYZED: 04/28/95
 CONTROL NO.: D107-B1W MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	95	30-140

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: WATER

BATCH NO.: 95D107 DATE RECEIVED: NA
SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 04/26/95
CONTROL NO.: D107-L1W/1D DATE ANALYZED: 04/28/95

ACCESSION: 95D107

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	LCS % REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC	% RPD
Naphthalene	ND	2.00	1.68	84	2.00	1.30	65	26
Phenanthrene	ND	2.00	2.09	104	2.00	1.70	85	21
Pyrene	ND	2.00	2.20	110	2.00	1.71	86	25
Benzo(a)pyrene	ND	2.00	1.70	85	2.00	1.42	71	18

QC LIMIT: 30-140 30-140



SDG# 95D107



JACOBS ENGINEERING GROUP INC. 95D107
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 566 - 8856 FAX (303) 566 - 8857

FW-A1012

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ES / R6A3

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT. WORTH					LABORATORY NAME & ADDRESS: CKY INC.						
PROJECT NUMBER: 10K70100			630 MAPLE AVE. TORRANCE CA 90503								
SAMPLE NUMBER	COLLECTION		SAMPLES INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	Q.C.	CONDITION ON RECEIPT	
	DATE	TIME									
1 101201	4/18/95	14:14	MJ	1	402 glass	4°C	S	SW 8020 BTEX SW 8310 PAH		T=icy	
2 101202	4/18/95	15:31	MJ	1	402 glass	4°C	S	SW 8020 BTEX SW 8310 PAH			
3 101203	4/18/95	16:16	MJ	1	402 glass	4°C	S	SW 8020 BTEX SW 8310 PAH			
4 101204	4/18/95	17:51	MJ	2	40-ml vial	HCl	W	SW 8020 BTEX			
5 101205	4/18/95	17:51	MJ	1	10 Amber	Na ₂ S ₂ O ₃	W	SW 8310 PAH			
6 101206	4/19/95	8:35	MJ	1	402 glass	4°C	S	SW 8020 SW 8310			
7 101207	4/20/95	9:47	MJ	1	402 glass	4°C	S	SW 8020			
8 101208	4/20/95	1320	DOS	2	40-ml VOA	HCl	W	SW 8020 BTEX			
9 101209	4/20/95	1320	DOS	1	1-Liter amber	Na ₂ S ₂ O ₃	W	SW 8310 PAH		▼	
COMMENTS:											
COLLECTED & RELEASED BY			DATE 4/21/95		TIME 10:00		TURNAROUND TIME				
RECEIVED BY			DATE 4/22/95		TIME 9:20		RELINQUISHED BY			DATE	TIME
RECORD RETURNED BY			DATE 1/1		TIME :		SHIPPING NUMBER:				

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

369 184



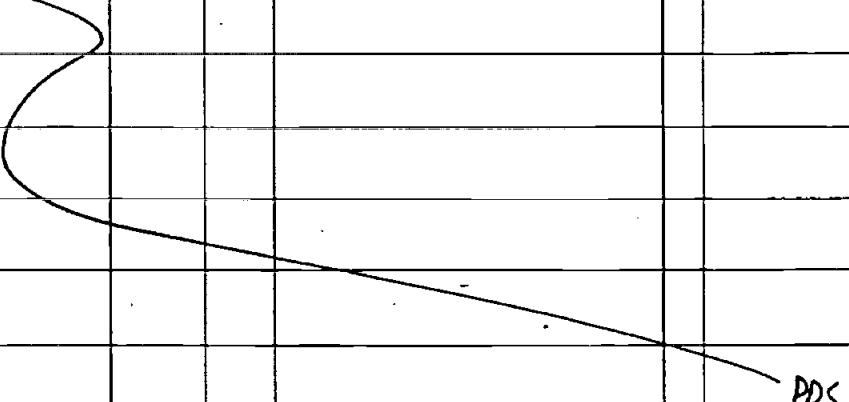
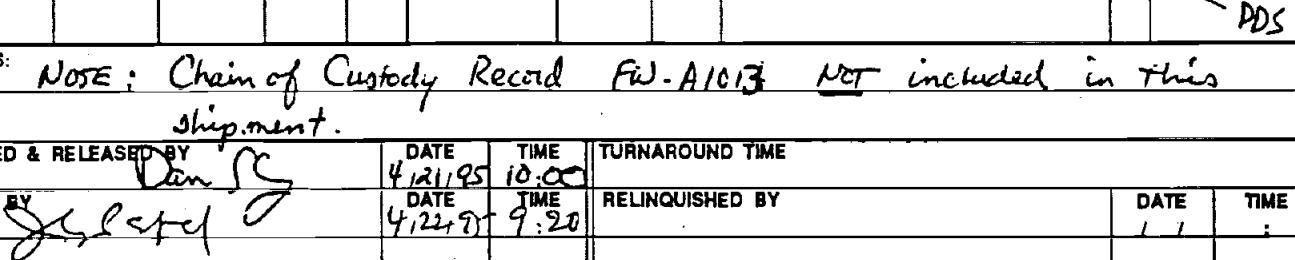
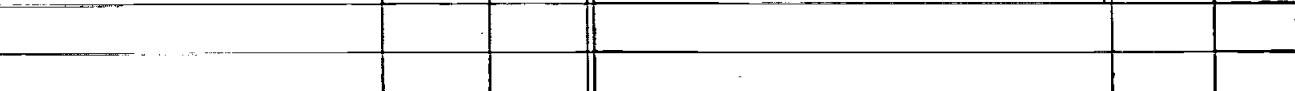
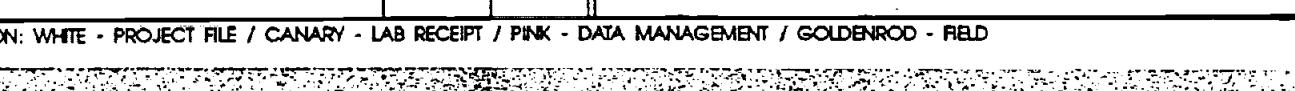
JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595-8855 FAX (303) 595-8857

FW-A1013 FW-A1014 ES/R6A3
MAS

95D107

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS FT WORTH				LABORATORY NAME & ADDRESS: CKY INC.						
PROJECT NUMBER: 10K70100				630 MAPLE AVE.						
WBS CODE:		SUBCONTRACT / D.O. No.			Torrance CA 90503					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED		COND. ON RECEIPT
	DATE	TIME								
10 FW-A101401	4/21/95	0850	MAS	2	40 ml vial	HCl	W	SW8520 BTEX		T=2°C
										
										
										
										
										
										
COMMENTS:		NOTE: Chain of Custody Record FW-A1013 <u>not</u> included in this shipment.								
COLLECTED & RELEASED BY <i>Dan SC</i>			DATE 4/21/95	TIME 10:00	TURNAROUND TIME					
RECEIVED BY <i>Selby</i>			DATE 4/22/95	TIME 9:20	RELINQUISHED BY			DATE 11	TIME :	
RECORD RETURNED BY			DATE 11	TIME :	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



335 53 335 53
335 53 335 53

**C K Y incorporated
Analytical Laboratories**

Date: 05-30-1995
CKY Batch No.: 95D134

RECEIVED

Attn: Lynn Schuetter

MAY 31 1995

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

JE o Denver

Subject: Laboratory Report
Project: NAS FORT WORTH 10-K701-00

Enclosed is the Laboratory report for samples received on
04/27/95. The samples were received in coolers with ice and
intact; the chain-of-custody forms were properly filled out.
The data reported include :

Sample ID	Control No.	Matrix	Analysis
FW-A101301	D134-01	Soil	EPA 8020
FW-A101302	D134-02	Soil	EPA 8020
			EPA 8310
FW-A101303	D134-03	Soil	EPA 8020
			EPA 8310
FW-A101304	D134-04	Soil	EPA 8020
			EPA 8310
FW-A101305	D134-05	Soil	EPA 8020
			EPA 8310
FW-A101306	D134-06	Soil	EPA 8020
			EPA 8310
FW-A101307	D134-07	Soil	EPA 8020
			EPA 8310
FW-A101308	D134-08	Water	EPA 8310
FW-A101309	D134-09	Water	EPA 8020
FW-A101501	D134-10	Soil	EPA 8020
			EPA 8310
FW-A101502	D134-11	Soil	EPA 8020
			EPA 8310

Sample ID	Control No.	Matrix	Analysis
FW-A101503	D134-12	Soil	EPA 8020 EPA 8310
FW-A101504	D134-13	Soil	EPA 8020 EPA 8310
FW-A101505	D134-14	Water	EPA 8020
FW-A101506	D134-15	Water	EPA 8310
FW-A101507	D134-16	Water	EPA 8020
FW-A101508	D134-17	Soil	EPA 8020

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,


Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/21/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101309 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-09 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/24/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
 BATCH NO.: 95D134 DATE EXTRACTED: NA
 SAMPLE ID: FW-A101505 DATE ANALYZED: 05/02/95
 CONTROL NO.: D134-14 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/26/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101507 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-16 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	88	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 05/02/95
CONTROL NO.: EVBLK04 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	95	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: VBLK02 DATE ANALYZED: 05/02/95
CONTROL NO.: EVBLK05 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	99	68-120

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: WATER

BATCH NO.: 95D134 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: EVLCS04 DATE ANALYZED: 05/02/95
ACCESSION: 95D134

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS RECOVERY (%)
Benzene	30.00	31.20	104
Toluene	30.00	27.50	92
Ethylbenzene	30.00	28.90	96
Xylenes	90.00	87.50	97

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

369 1153
CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: WATER

=====

BATCH NO.: 95D134 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: EVLCS05 DATE ANALYZED: 05/02/95

ACCESSION: 95D134

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS	RECOVERY (%)
Benzene	30.00	31.10		104
Toluene	30.00	27.40		91
Ethylbenzene	30.00	28.70		96
Xylenes	90.00	86.60		96

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: WATER

BATCH NO.: 95D134 DATE RECEIVED: 04/27/95
 SAMPLE ID: FW-A101309 DATE EXTRACTED: NA
 CONTROL NO.: D134-09 DATE ANALYZED: 05/02/95

ACCESSION: 95D134

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	MS CONC (ug/L)	% REC	SPIKE ADDED (ug/L)	MSD CONC (ug/L)	% REC	MSD % RPD
Benzene	ND	30.00	30.90	103	30.00	30.90	103	0
Toluene	ND	30.00	27.50	92	30.00	27.50	92	0
Ethylbenzene	ND	30.00	28.90	96	30.00	29.00	97	0
Xylenes	ND	90.00	86.50	96	90.00	87.80	98	1

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129



EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/20/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A101301	DATE ANALYZED:	05/02/95
CONTROL NO.:	D134-01	MATRIX:	SOIL
% MOISTURE:	12.69	DILUTION FACTOR:	50

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	115
Toluene	180	115
Ethylbenzene	207	115
Total Xylenes	990	286

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	115	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/21/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101302 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-02 MATRIX: SOIL
% MOISTURE: 12.88 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.3
Toluene	ND	2.3
Ethylbenzene	ND	2.3
Total Xylenes	ND	5.7
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	89	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A101303	DATE ANALYZED:	05/02/95
CONTROL NO.:	D134-03	MATRIX:	SOIL
% MOISTURE:	19.08	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	4.9	2.5
Toluene	4.7	2.5
Ethylbenzene	4.8	2.5
Total Xylenes	16.7	6.2
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	77	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/21/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101304 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-04 MATRIX: SOIL
% MOISTURE: 15.44 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	5.9
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	93	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A101305	DATE ANALYZED:	05/02/95
CONTROL NO.:	D134-05	MATRIX:	SOIL
% MOISTURE:	16.75	DILUTION FACTOR:	500

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	27000	1201
Toluene	25000	1201
Ethylbenzene	53000	1201
Total Xylenes	100000	3003
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	112	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/21/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
 BATCH NO.: 95D134 DATE EXTRACTED: NA
 SAMPLE ID: FW-A101306 DATE ANALYZED: 05/02/95
 CONTROL NO.: D134-06 MATRIX: SOIL
 % MOISTURE: 8.42 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	72	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/21/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
 BATCH NO.: 95D134 DATE EXTRACTED: NA
 SAMPLE ID: FW-A101307 DATE ANALYZED: 05/02/95
 CONTROL NO.: D134-07 MATRIX: SOIL
 % MOISTURE: 17.58 DILUTION FACTOR: 100
 =====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	1800	243
Toluene	200	243
Ethylbenzene	240	243
Total Xylenes	1800	607

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	103	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/24/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101501 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-10 MATRIX: SOIL
% MOISTURE: 16.81 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	89	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/24/95
 PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
 BATCH NO.: 95D134 DATE EXTRACTED: NA
 SAMPLE ID: FW-A101502 DATE ANALYZED: 05/02/95
 CONTROL NO.: D134-11 MATRIX: SOIL
 % MOISTURE: 17.71 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6.1
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	79	47-135

=====
 PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

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CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/24/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101503 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-12 MATRIX: SOIL
% MOISTURE: 8.11 DILUTION FACTOR: 100
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	218
Toluene	ND	218
Ethylbenzene	570	218
Total Xylenes	3420	544
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	105	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

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CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/24/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101504 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-13 MATRIX: SOIL
% MOISTURE: 6.70 DILUTION FACTOR: 500
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	1072
Toluene	ND	1072
Ethylbenzene	ND	1072
Total Xylenes	ND	2680

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	92	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/26/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: FW-A101508 DATE ANALYZED: 05/02/95
CONTROL NO.: D134-17 MATRIX: SOIL
% MOISTURE: 2.93 DILUTION FACTOR: 500
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	1030
Toluene	ND	1030
Ethylbenzene	ND	1030
Total Xylenes	ND	2575
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	90	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: NA
BATCH NO.: 95D134 DATE EXTRACTED: NA
SAMPLE ID: VBLK03 DATE ANALYZED: 05/02/95
CONTROL NO.: EVBLK04 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	95	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95D134	DATE EXTRACTED:	NA
SAMPLE ID:	VBLK04	DATE ANALYZED:	05/02/95
CONTROL NO.:	EVBLK05	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	99	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FORT WORTH 10-K701-00
 METHOD: EPA 8020
 MATRIX: SOIL
 % MOISTURE: 17.71

BATCH NO.: 95D134 DATE RECEIVED: 04/27/95
 SAMPLE ID: FW-A101502 DATE EXTRACTED: NA
 CONTROL NO.: D134-11 DATE ANALYZED: 05/02/95

ACCESSION: 95D134

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% REC	MSD CONC (ug/kg)	% RPD
Benzene	ND	36.46	36.09	99	36.46	36.33	100	100	1
Toluene	ND	36.46	31.60	87	36.46	32.20	88	88	1
Ethylbenzene	ND	36.46	33.42	92	36.46	33.90	93	93	1
Xylenes	ND	109	101	93	109	101	92	92	1

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: SOIL

BATCH NO.: 95D134 DATE RECEIVED: NA
SAMPLE ID: LCS3 DATE EXTRACTED: NA
CONTROL NO.: EVLCS04 DATE ANALYZED: 05/02/95

ACCESSION: 95D134

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	30.00	31.20		104
Toluene	30.00	27.50		92
Ethylbenzene	30.00	28.90		96
Xylenes	90.00	87.50		97

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA 8020
MATRIX: SOIL

BATCH NO.: 95D134 DATE RECEIVED: NA
SAMPLE ID: LCS4 DATE EXTRACTED: NA
CONTROL NO.: EVLCS05 DATE ANALYZED: 05/02/95

ACCESSION: 95D134

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS RECOVERY (%)
Benzene	30.00	31.10	104
Toluene	30.00	27.40	91
Ethylbenzene	30.00	28.70	96
Xylenes	90.00	86.60	96

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101308	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-08	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	98	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/24/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101506	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-15	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	98	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-B1W	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	results (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phénanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	92	30-140

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: WATER
MOISTURE: NA

BATCH NO.: 95D134 DATE RECEIVED: NA
SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 04/28/95
CONTROL NO.: D134-L1W/1D DATE ANALYZED: 05/03/95

ACCESSION: 95D134

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	LCS % REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC	% RPD
Naphthalene	ND	2.00	1.48	74	2.00	1.45	73	1
Phenanthrene	ND	2.00	1.76	88	2.00	1.83	92	4
Pyrene	ND	2.00	1.63	82	2.00	1.76	88	7
Benzo(a)pyrene	ND	2.00	1.25	63	2.00	1.49	75	17

QC LIMIT: 30-140 30-140



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101302	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-02	MATRIX:	SOIL
% MOISTURE:	12.88	DILUTION FACTOR:	1

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	57
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	93	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101303	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-03	MATRIX:	SOIL
% MOISTURE:	19.08	DILUTION FACTOR:	1

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	62
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	95	30-140

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101304	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-04	MATRIX:	SOIL
% MOISTURE:	15.44	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	59
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenz(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	89	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101305	DATE ANALYZED:	05/05/95
CONTROL NO.:	D134-05	MATRIX:	SOIL
% MOISTURE:	16.75	DILUTION FACTOR:	200

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	3123
Acenaphthylene	ND~	1202
Anthracene	ND	3123
Benzo(a)anthracene	ND	3123
Benzo(b)fluoranthene	ND	3123
Benzo(k)fluoranthene	ND	3123
Benzo(g,h,i)perylene	ND	3123
Benzo(a)pyrene	ND	3123
Chrysene	ND	3123
Dibenzo(a,h)anthracene	ND	3123
Fluoranthene	9100 ^z	3123
Fluorene	ND	3123
Indeno(1,2,3-cd)pyrene	ND	3123
Naphthalene	23500 ^z	3123
Phenanthrene	ND	3123
Pyrene	ND	3123
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	DO	30-140

PQL: Practical Quantitation Limit

DO : Diluted out

^z : Dilution factor = 20, from UV detector analyzed on 05/04/95

: Confirmed by GC/MS

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101306	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-06	MATRIX:	SOIL
% MOISTURE:	8.42	DILUTION FACTOR:	1

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	14
Acenaphtylene	ND	55
Anthracene	ND	14
Benzo(a)anthracene	ND	14
Benzo(b)fluoranthene	ND	14
Benzo(k)fluoranthene	ND	14
Benzo(g,h,i)perylene	ND	14
Benzo(a)pyrene	ND	14
Chrysene	ND	14
Dibenzo(a,h)anthracene	ND	14
Fluoranthene	ND	14
Fluorene	ND	14
Indeno(1,2,3-cd)pyrene	ND	14
Naphthalene	ND	14
Phenanthrene	ND	14
Pyrene	ND	14
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	86	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/21/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101307	DATE ANALYZED:	05/05/95
CONTROL NO.:	D134-07	MATRIX:	SOIL
% MOISTURE:	17.58	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphthylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	28	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	85	30-140

PQL: Practical Quantitation Limit
 : Confirmed by GC/MS

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

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CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/24/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101501	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-10	MATRIX:	SOIL
% MOISTURE:	16.81	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	60
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenz(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	95	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

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CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 04/24/95
PROJECT: NAS FORT WORTH 10-K701-00 DATE RECEIVED: 04/27/95
BATCH NO.: 95D134 DATE EXTRACTED: 04/28/95
SAMPLE ID: FW-A101502 DATE ANALYZED: 05/03/95
CONTROL NO.: D134-11 MATRIX: SOIL
% MOISTURE: 17.71 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	94	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/24/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101503	DATE ANALYZED:	05/05/95
CONTROL NO.:	D134-12	MATRIX:	SOIL
% MOISTURE:	8.11	DILUTION FACTOR:	50

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	707
Acenaphtylene	ND	2721
Anthracene	ND	707
Benzo(a)anthracene	ND	707
Benzo(b)fluoranthene	ND	707
Benzo(k)fluoranthene	ND	707
Benzo(g,h,i)perylene	ND	707
Benzo(a)pyrene	ND	707
Chrysene	ND	707
Dibenzo(a,h)anthracene	ND	707
Fluoranthene	2600 [^]	707
Fluorene	ND	707
Indeno(1,2,3-cd)pyrene	ND	707
Naphthalene	910 [^]	707
Phenanthrene	720 [^]	707
Pyrene	1800 [^]	707
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	DO	30-140

PQL: Practical Quantitation Limit

DO : Diluted out

[^] : Confirmed by GC/MS

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	04/24/95
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	04/27/95
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	FW-A101504	DATE ANALYZED:	05/05/95
CONTROL NO.:	D134-13	MATRIX:	SOIL
% MOISTURE:	6.70	DILUTION FACTOR:	10

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	139
Acenaphtylene	ND	536
Anthracene	ND	139
Benzo(a)anthracene	ND	139
Benzo(b)fluoranthene	ND	139
Benzo(k)fluoranthene	ND	139
Benzo(g,h,i)perylene	ND	139
Benzo(a)pyrene	ND	139
Chrysene	ND	139
Dibenzo(a,h)anthracene	ND	139
Fluoranthene	620^	139
Fluorene	500^	139
Indeno(1,2,3-cd)pyrene	ND	139
Naphthalene	180^	139
Phenanthrene	140^	139
Pyrene	500^	139
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	126	30-140

PQL: Practical Quantitation Limit
^ : Confirmed by GC/MS

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FORT WORTH 10-K701-00	DATE RECEIVED:	NA
BATCH NO.:	95D134	DATE EXTRACTED:	04/28/95
SAMPLE ID:	PBLK02	DATE ANALYZED:	05/03/95
CONTROL NO.:	D134-B1S	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	13
Acenaphtylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1,2,3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	106	30-140

PQL: Practical Quantitation Limit

**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: SOIL
MOISTURE: 12.88

BATCH NO.: 95D134 DATE RECEIVED: 04/27/95
SAMPLE ID: FW-A101302 DATE EXTRACTED: 04/28/95
CONTROL NO.: D134-02 DATE ANALYZED: 05/03/95

ACCESSION: 95D134

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Naphthalene	ND	115	100	88	115	117	102	15
Phenanthrene	ND	115	110	96	115	129	112	16
Pyrene	ND	115	104	91	115	121	105	14
Benzo(a)pyrene	ND	115	84	73	115	88	76	5
QC LIMIT:				30-140			30-140	

**CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FORT WORTH 10-K701-00
METHOD: EPA METHOD 8310
MATRIX: SOIL
% MOISTURE: NA

BATCH NO.: 95D134 **DATE RECEIVED:** NA
SAMPLE ID: LCS2/LCS2D **DATE EXTRACTED:** 04/28/95
CONTROL NO.: D134-L1S/1D **DATE ANALYZED:** 05/03/95

ACCESSION: 95D134

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	LCS CONC (ug/kg)	LCS % REC	SPIKE ADDED (ug/kg)	LCSD CONC (ug/kg)	LCSD % REC	% RPD
Naphthalene	ND	100	104	104	100	92	92	13
Phenanthrene	ND	100	111	111	100	102	102	8
Pyrene	ND	100	107	107	100	100	100	7
Benzo(a)pyrene	ND	100	96	96	100	92	92	4

QC LIMIT: 30-140 30-140



SDG #95D134

95D134

FW-A1013

G11RGA3



JACOBS ENGINEERING GROUP INC.
800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 695 - 8856 FAX (303) 695 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: <i>NAS FT WORTH</i>					LABORATORY NAME & ADDRESS: <i>Cry Ink</i>					
PROJECT NUMBER: <i>10K 70100</i>					<i>630 MAPLE AVE</i>					
WBS CODE:		SUBCONTRACT / D.O. No.			<i>TORRANCE, CA 90503</i>					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	Q	CONDITION ON RECEIPT
	DATE	TIME								
1 ✓ FW-A 101301	4/20/95	14:49	<i>MJ</i>	1	402 glass	4°C	3	<i>SW 8020</i>		<i>T=2°C</i>
2 ✓ FW-A 101302	4/21/95	14:53	<i>MJ</i>	1	402 glass	4°C	5	<i>SW 8020 SW 8310</i>		
3 ✓ FW-A 101303	4/21/95	14:44	<i>MJ</i>	1	402 glass	4°C	5	<i>SW 8020 SW 8310</i>		
4 ✓ FW-A 101304	4/21/95	14:59	<i>MJ</i>	1	402 glass	4°C	5	<i>SW 8020 SW 8310</i>		
5 ✓ FW-A 101305	4/21/95	15:26	<i>MJ</i>	1	402 glass	4°C	5	<i>SW 8020 SW 8310</i>		
6 ✓ FW-A 101306	4/21/95	15:56	<i>MJ</i>	1	402 glass	4°C	5	<i>SW 8020 SW 8310</i>		
7 ✓ FW-A 101307	4/21/95	16:12	<i>MJ</i>	1	402 glass	4°C	5	<i>SW 8020 SW 8310</i>		
8 ✓ FW-A 101308	4/21/95	18:02	<i>MJ</i>	1	ie Amber	<i>Na2SO4 O3</i>	w	<i>SW 8310</i>		
9 ✓ FW-A 101309	4/21/95	18:02	<i>MJ</i>	2	40 ml vial	4°C	w	<i>SW 8020</i>		<i>✓</i>
COMMENTS:										
COLLECTED BY			DATE	TIME	TURNAROUND TIME					
<i>D. Miller</i>			4/21/95	18:16						
RECEIVED BY			DATE	TIME	RELINQUISHED BY					
<i>D. Miller</i>			4/27/95	10:15						
RECORD RETURNED BY			DATE	TIME						
			1/1	:						
SHIPPING NUMBER:										

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



JACOBS ENGINEERING GROUP INC.
500 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595-8855 FAX (303) 595-8857

SD# 75D134

95D134

FW-A101X^{3rd} 5

611R6A3

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:				LABORATORY NAME & ADDRESS:					
PROJECT NUMBER:				C30 MAPLE AVE.					
WBS CODE:		SUBCONTRACT / D.O. No.		TORRANCE, CA 90503					
SAMPLE NUMBER	COLLECTION	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER CONCEALMENT TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED		
	DATE	TIME					CONDITION ON RECEIPT		
10	FW-A 101501	4/24/95	10:31	mj	1	402 GLASS	4°C S	SW 8020 SW 8310	T-2 C gm
11	FW-A 101502	4/24/95	10:31	mj	1	402 glass	4°C S	SW 8020 SW 8310	
12	FW-A 101503	4/24/95	14:22	mj	1	402 glass	4°C S	SW 8020 SW 8310	
13	FW-A 101504	4/24/95	14:22	mj	1	402 glass	4°C S	SW 8020 SW 8310	
14	FW-A 101505	4/24/95	15:32	mj	2	40ml vial	HCl W	SW 8020	
15	FW-A 101506	4/24/95	15:32	mj	1	1e Amber	Na2S2 O3 W	SW 8310	
16	FW-A 101507	4/26/95	15:16	mj	2	40ml vial	HCl W	SW 8020	
17	FW-A 101508	4/26/95	16:01	mj	1	402 GLASS	4°C S	SW 8020	

COMMENTS:

COLLECTED & PREPARED BY	DATE	TIME	TURNAROUND TIME
	4/26/95	16:20	
RECEIVED BY	DATE	TIME	RELINQUISHED BY
	4/27/95	10:15	
RECORD RETURNED BY	DATE	TIME	
	11	:	
			SHIPPING NUMBER:

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



**C K Y incorporated
Analytical Laboratories**

Date: 06-02-1995
CKY Batch No.: 95E086

RECEIVED

Attn: Lynn Schuetter

JUN - 5 1995

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

JL: Denver

Subject: Laboratory Report
Project: NAS FW Pipeline Aban. 10K70100

Enclosed is the Laboratory report for samples received on 05/22/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

Sample ID	Control No.	Matrix	Analysis
FW-A 101801	E086-01	Soil	EPA 8020
			EPA 418.1
FW-A 101802	E086-02	Soil	EPA 8020
			EPA 418.1
FW-A 101803	E086-03	Soil	EPA 8020
			EPA 418.1
FW-A 101804	E086-04	Soil	EPA 8020
			EPA 418.1
FW-A 101805	E086-05	Soil	EPA 8020
			EPA 418.1
FW-A 101806	E086-06	Soil	EPA 8020
			EPA 418.1

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBON

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: 05/22/95
MATRIX: SOIL DATE ANALYZED: 05/24/95

=====

SAMPLE ID	CONTROL NO	RESULT (mg/kg)	DL FACTOR	MOIST (%)	PQL (mg/kg)
FW-A 101801	E086-01	264	2	9.24	66
FW-A 101802	E086-02	682	2	7.59	65
FW-A 101803	E086-03	ND	1	17.22	36
FW-A 101804	E086-04	225	1	11.16	34
FW-A 101805	E086-05	394	2	8.62	66
FW-A 101806	E086-06	498	5	9.65	166
TBLK01	E086-B1S	ND	1	NA	30

PQL : Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL
MOISTURE: 9.24

BATCH NO.: 95E086 DATE RECEIVED: 05/22/95
SAMPLE ID: FW-A 101801 DATE EXTRACTED: 05/22/95
CONTROL NO.: E086-01 DATE ANALYZED: 05/24/95

ACCESSION: 95E084 95E086

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	MS CONC (mg/kg)	% MS REC	SPIKE ADDED (mg/kg)	MSD CONC (mg/kg)	% MSD REC	% RPD
TRPH	241	150	342	67	150	332	61	9

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA METHOD 418.1
 MATRIX: SOIL

BATCH NO.:	95E086	DATE RECEIVED:	NA
SAMPLE ID:	LCS1/LCS1D	DATE EXTRACTED:	05/22/95
CONTROL NO.:	E086L1S/1D	DATE ANALYZED:	05/24/95

ACCESSION: 95E086

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	LCS CONC (mg/kg)	LCS % REC	SPIKE ADDED (mg/kg)	LCSD CONC (mg/kg)	LCSD % REC	% RPD
TRPH	ND	150	170	113	150	171	114	1

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101801 DATE ANALYZED: 05/30/95
CONTROL NO.: E086-01 MATRIX: SOIL
% MOISTURE: 9.24 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	85	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101802 DATE ANALYZED: 05/30/95
CONTROL NO.: E086-02 MATRIX: SOIL
% MOISTURE: 7.59 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.4
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	120	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101803 DATE ANALYZED: 05/30/95
CONTROL NO.: E086-03 MATRIX: SOIL
% MOISTURE: 17.22 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.4
Toluene	ND	2.4
Ethylbenzene	ND	2.4
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	110	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101804 DATE ANALYZED: 05/31/95
CONTROL NO.: E086-04 MATRIX: SOIL
% MOISTURE: 11.16 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.3
Toluene	ND	2.3
Ethylbenzene	ND	2.3
Total Xylenes	ND	5.6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101805 DATE ANALYZED: 05/31/95
CONTROL NO.: E086-05 MATRIX: SOIL
% MOISTURE: 8.62 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101806 DATE ANALYZED: 05/31/95
CONTROL NO.: E086-06 MATRIX: SOIL
% MOISTURE: 9.65 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.2
Toluene	ND	2.2
Ethylbenzene	ND	2.2
Total Xylenes	ND	5.5
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	104	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 05/31/95
CONTROL NO.: EVBLK04 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	2.0
Toluene	ND	2.0
Ethylbenzene	ND	2.0
Total Xylenes	ND	5.0
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	95	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: SOIL

BATCH NO.: 95E086 DATE RECEIVED: 05/22/95
 SAMPLE ID: FW-A 101803 DATE EXTRACTED: NA
 CONTROL NO.: E086-03 DATE ANALYZED: 05/30/95

ACCESSION: 95E086

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Benzene	ND	60.20	54.30	90	60.20	54.50	91	0
Toluene	ND	60.20	42.80	71	60.20	37.80	63	12
Ethylbenzene	ND	60.20	38.00	63	60.20	31.30	52	+ 19
Xylenes	ND	181	107	59	181	89	49	+ 18

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

NOTE: + Matrix interference.



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
MATRIX: SOIL

BATCH NO.: 95E086 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: EVLCS04 DATE ANALYZED: 05/31/95

ACCESSION: 95E086

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS RECOVERY (%)
Benzene	50.0	56.3	113
Toluene	50.0	49.9	100
Ethylbenzene	50.0	51.9	104
Xylenes	150	154	103

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



SDG #95 ED 86

95 ED 86

G1



JACOBS ENGINEERING GROUP INC.
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CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME:					LABORATORY NAME & ADDRESS:				
PROJECT NUMBER:					630 Maple Avenue				
WBS CODE:		SUBCONTRACT / D.O. No.			Torrance, CA 90503			(310) 618-8889	
SAMPLE NUMBER	COLLECTION	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	G	CONDITION ON RECEIPT
	DATE	TIME						G	
1	ZW-A 101801	5/19/95	15:20	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
2	ZW-A 101802	5/19/95	15:28	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
3	ZW-A 101803	5/19/95	15:37	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
4	ZW-A 101804	5/19/95	15:46	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
5	ZW-A 101805	5/19/95	16:00	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
6	ZW-A 101806	5/19/95	16:11	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
	ZW-A 101807				2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
	ZW-A 101808				2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310
	ZW-A 101809				2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310

COMMENTS:

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME
<i>[Signature]</i>	5/19/95	18:14	7 days
RECEIVED BY	DATE	TIME	RELINQUISHED BY
<i>[Signature]</i>	5/22/95	10:00 AM	
RECORD RETURNED BY	DATE	TIME	
	11	:	
			SHIPPING NUMBER:

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SAMPLE RECEIPT FORM

6

CHY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818



3 SEP 95
3 SEP 95

**CKY incorporated
Analytical Laboratories**

Date: 06-20-1995
CKY Batch No.: 95E084

RECEIVED

Attn: Lynn Schuetter

JUN 21 1995

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

JE • Denver

Subject: Laboratory Report
Project: NAS FW Pipeline Aban. 10K70100

Enclosed is the Laboratory report for samples received on 05/19/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

Sample ID	Control No.	Matrix	Analysis
FW-A 101601	E084-01	Soil	EPA 8020
FW-A 101602	E084-02	Soil	EPA 418.1
FW-A 101603	E084-03	Soil	EPA 8020
FW-A 101604	E084-04	Soil	EPA 418.1
FW-A 101605	E084-05	Soil	EPA 8020
FW-A 101606	E084-06	Soil	EPA 418.1
FW-A 101607	E084-07	Soil	EPA 8020
FW-A 101608	E084-08	Soil	EPA 418.1
FW-A 101609	E084-09	Soil	EPA 8020
FW-A 101701	E084-10	Soil	EPA 418.1
FW-A 101702	E084-11	Soil	EPA 8020
FW-A 101703	E084-12	Soil	EPA 418.1
FW-A 101704	E084-13	Soil	EPA 8020
FW-A 101705	E084-14	Soil	EPA 418.1
FW-A 101706	E084-15	Soil	EPA 8020
			EPA 418.1

Sample ID	Control No.	Matrix	Analysis
FW-A 101707	E084-16	Soil	EPA 8020 EPA 418.1
FW-A 101708	E084-17	Soil	EPA 8020 EPA 418.1
FW-A 101709	E084-18	Soil	EPA 8020 EPA 418.1
FW-A 102001	E084-19	Water	EPA 602
FW-A 102002	E084-20	Water	EPA 418.1
FW-A 102003	E084-21	Water	EPA 602
FW-A 102004	E084-22	NA	Cancelled

The results are summarized on the following pages.

Samples with detected amount of BTEX by GC were reanalyzed in GC/MS for confirmation. No BTEX was found in these samples by GC/MS.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang
Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.



EPA METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBON

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	05/17/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	05/19/95
BATCH NO.:	95E084	DATE EXTRACTED:	05/22/95
MATRIX:	SOIL	DATE ANALYZED:	05/22/95

=====

SAMPLE ID	CONTROL NO	RESULT (mg/kg)	DL FACTOR	MOIST (%)	PQL (mg/kg)
FW-A 101601	E084-01	353	1	17.95	37
FW-A 101602	E084-02	ND	1	19.83	37
FW-A 101603	E084-03	ND	1	17.45	36
FW-A 101604	E084-04	111	1	16.92	36
FW-A 101605	E084-05	ND	1	17.70	36
FW-A 101606	E084-06	ND	1	15.05	35
FW-A 101607	E084-07	ND	1	20.56	38
FW-A 101608	E084-08	794	10	10.56	335
FW-A 101609	E084-09	284	1	11.89	34
FW-A 101701	E084-10	92	1	13.33	35
FW-A 101702	E084-11	ND	1	16.50	36
FW-A 101703	E084-12	1200	5	8.67	164
FW-A 101704	E084-13	200	1	9.96	33
FW-A 101705	E084-14	41	1	10.13	33
FW-A 101706	E084-15	783	10	9.35	331
FW-A 101707	E084-16	184	1	7.58	32
FW-A 101708	E084-17	497	5	9.52	166
FW-A 101709	E084-18	540	2	9.32	66
TBLK01	E084-B1S	ND	1	NA	30

PQL : Practical Quantitation Limit

Collection Date: 05/18/95 for E084-06 to E084-18



CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL

BATCH NO.: 95E084 DATE RECEIVED: 05/19/95
SAMPLE ID: FW-A 101701 DATE EXTRACTED: 05/22/95
CONTROL NO.: E084-10 DATE ANALYZED: 05/22/95

ACCESSION: 95E084

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	MS CONC (mg/kg)	% MS REC	SPIKE ADDED (mg/kg)	MSD CONC (mg/kg)	% MSD REC	% RPD
TRPH	92	173	292	116	173	291	115	1

EPA METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBON

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: 05/22/95
MATRIX: WATER DATE ANALYZED: 05/24/95

=====

SAMPLE ID	CONTROL NO	RESULT (ug/L)	DILUTION FACTOR	PQL (ug/L)
FW-A 102002	E084-20	1800 *	1	1000
TBLK01	E084-B1W	ND	1	1000

PQL : Practical Quantitation Limit

* : Revised

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL
% MOISTURE: 9.35

BATCH NO.: 95E084 DATE RECEIVED: 05/19/95
SAMPLE ID: FW-A 101706 DATE EXTRACTED: 05/22/95
CONTROL NO.: E084-15 DATE ANALYZED: 05/22/95

ACCESSION: 95E084

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	MS CONC (mg/kg)	MS % REC	SPIKE ADDED (mg/kg)	MSD CONC (mg/kg)	MSD % REC	% RPD
TRPH	783	165	838	33	165	776	NA +	NA

NOTE: + Outside the control limit due to sample concentration more than 4x spike level.



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL

BATCH NO.: 95E084 DATE RECEIVED: NA
SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 05/22/95
CONTROL NO.: E084L1S/1D DATE ANALYZED: 05/22/95

ACCESSION: 95E084

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	LCS CONC (mg/kg)	LCS % REC	SPIKE ADDED (mg/kg)	LCSD CONC (mg/kg)	LCSD % REC	% RPD
TRPH	ND	150	156	104	150	156	104	0



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: WATER

BATCH NO.: 95E084 DATE RECEIVED: NA
SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 05/22/95
CONTROL NO.: E084L1S/1D DATE ANALYZED: 05/24/95

ACCESSION: 95E084 95E084

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	LCS % REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC	% RPD
TRPH	ND	150	146	97	150	147	97	0



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/17/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101601 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-01 MATRIX: SOIL
% MOISTURE: 17.95 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	183
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	97	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/17/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101602 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-02 MATRIX: SOIL
% MOISTURE: 19.83 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	62
Toluene	ND	62
Ethylbenzene	ND	62
Total Xylenes	ND	187
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	89	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/17/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101603 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-03 MATRIX: SOIL
% MOISTURE: 17.45 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	182
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	72	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/17/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101604 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-04 MATRIX: SOIL
% MOISTURE: 16.92 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	60
Toluene	ND	60
Ethylbenzene	ND	60
Total Xylenes	ND	181
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	74	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/17/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101605 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-05 MATRIX: SOIL
% MOISTURE: 17.70 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	182
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101606 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-06 MATRIX: SOIL
% MOISTURE: 15.05 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	177
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	89	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101607 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-07 MATRIX: SOIL
% MOISTURE: 20.56 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	63
Toluene	ND	63
Ethylbenzene	ND	63
Total Xylenes	ND	189
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	70	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	05/18/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	05/19/95
BATCH NO.:	95E084	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A 101608	DATE ANALYZED:	05/29/95
CONTROL NO.:	E084-08	MATRIX:	SOIL
% MOISTURE:	10.56	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	168
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	80	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101609 DATE ANALYZED: 05/29/95
CONTROL NO.: E084-09 MATRIX: SOIL
% MOISTURE: 11.89 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	57
Toluene	ND	57
Ethylbenzene	ND	57
Total Xylenes	ND	170
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	73	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101701 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-10 MATRIX: SOIL
% MOISTURE: 13.33 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	58
Toluene	ND	58
Ethylbenzene	ND	58
Total Xylenes	ND	173
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	45 +	47-135

=====

PQL: Practical Quantitation Limit
+ : Out of the control limit probably due to matrix interference

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101702 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-11 MATRIX: SOIL
% MOISTURE: 16.50 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	60
Toluene	ND	60
Ethylbenzene	ND	60
Total Xylenes	ND	180
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	48	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
 BATCH NO.: 95E084 DATE EXTRACTED: NA
 SAMPLE ID: FW-A 101703 DATE ANALYZED: 05/30/95
 CONTROL NO.: E084-12 MATRIX: SOIL
 % MOISTURE: 8.67 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	55
Toluene	ND	55
Ethylbenzene	ND	55
Total Xylenes	ND	164

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	53	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101704 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-13 MATRIX: SOIL
% MOISTURE: 9.96 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	167
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	100	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101705 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-14 MATRIX: SOIL
% MOISTURE: 10.13 DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	167
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	62	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101706 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-15 MATRIX: SOIL
% MOISTURE: 9.35 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	55
Toluene	ND	55
Ethylbenzene	ND	55
Total Xylenes	ND	165
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	68	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101707 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-16 MATRIX: SOIL
% MOISTURE: 7.58 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	54
Toluene	ND	54
Ethylbenzene	ND	54
Total Xylenes	ND	162
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	135	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
 BATCH NO.: 95E084 DATE EXTRACTED: NA
 SAMPLE ID: FW-A 101708 DATE ANALYZED: 05/30/95
 CONTROL NO.: E084-17 MATRIX: SOIL
 % MOISTURE: 9.52 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	55
Toluene	ND	55
Ethylbenzene	ND	55
Total Xylenes	ND	166

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	71	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101709 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-18 MATRIX: SOIL
% MOISTURE: 9.32 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	55
Toluene	ND	55
Ethylbenzene	ND	55
Total Xylenes	ND	165
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	74	47-135

=====

PQL: Practical Quantitation Limit

Non-detected (ND) was confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 05/29/95
CONTROL NO.: EVBLK01 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	113	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
 BATCH NO.: 95E084 DATE EXTRACTED: NA
 SAMPLE ID: VBLK02 DATE ANALYZED: 05/29/95
 CONTROL NO.: EVBLK02 MATRIX: SOIL
 % MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	117	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: VBLK03 DATE ANALYZED: 05/30/95
CONTROL NO.: EVBLK03 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: SOIL
 % MOISTURE: 13.33

BATCH NO.: 95E084 DATE RECEIVED: 05/19/95
 SAMPLE ID: FW-A 101701 DATE EXTRACTED: NA
 CONTROL NO.: E084-10 DATE ANALYZED: 05/30/95

ACCESSION: 95E084

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% REC	% RPD
Benzene	ND	57.7	45.8	79	57.7	55.1	95	18
Toluene	ND	57.7	24.6	43 +	57.7	31.4	54 +	24
Ethylbenzene	ND	57.7	14.0	24 +	57.7	15.6	27 +	11
Xylenes	ND	173.1	24.9	14 +	173.1	39.6	23 +	46

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

NOTE: + Outside the control limit probably due to matrix interference.



**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: SOIL
 MOISTURE: 9.35

BATCH NO.: 95E084 DATE RECEIVED: 05/19/95
 SAMPLE ID: FW-A 101706 DATE EXTRACTED: NA
 CONTROL NO.: E084-15 DATE ANALYZED: 05/30/95
 ACCESSION: 95E084

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	MS % REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	MSD % REC	% RPD
Benzene	ND	275.8	261.2	95	275.8	245.1	89	6
Toluene	ND	275.8	139.7	51 +	275.8	105.1	38 +	28
Ethylbenzene	ND	275.8	79.5	29 +	275.8	33.2	12 +	82
Xylenes	114	827.4	367.3	31 +	827.4	356.7	29 +	4

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

NOTE: + Outside the control limit probably due to matrix interference.



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: SOIL

BATCH NO.: 95E084 DATE RECEIVED: NA
 SAMPLE ID: LCS1 DATE EXTRACTED: NA
 CONTROL NO.: EVLCS01 DATE ANALYZED: 05/29/95

ACCESSION: 95E084

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS RECOVERY (%)
Benzene	50.0	61.5	123
Toluene	50.0	56.8	114
Ethylbenzene	50.0	59.7	119
Xylenes	150.0	179.4	120

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
MATRIX: SOIL

BATCH NO.: 95E084 DATE RECEIVED: NA
SAMPLE ID: LCS2 DATE EXTRACTED: NA
CONTROL NO.: EVLCS02 DATE ANALYZED: 05/29/95
ACCESSION: 95E084

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	50.0	57.4		115
Toluene	50.0	52.1		104
Ethylbenzene	50.0	54.1		108
Xylenes	150.0	162.6		108

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: SOIL

BATCH NO.: 95E084 DATE RECEIVED: NA
 SAMPLE ID: LCS3 DATE EXTRACTED: NA
 CONTROL NO.: EVLCS03 DATE ANALYZED: 05/30/95
 ACCESSION: 95E084

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	50.0	56.4		113
Toluene	50.0	50.5		101
Ethylbenzene	50.0	52.8		106
Xylenes	150	159		106

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102001 DATE ANALYZED: 05/30/95
CONTROL NO.: E084-19 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	102	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/18/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/19/95
 BATCH NO.: 95E084 DATE EXTRACTED: NA
 SAMPLE ID: FW-A 102003 DATE ANALYZED: 05/30/95
 CONTROL NO.: E084-21 MATRIX: WATER
 % MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	6

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	105	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95E084 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 05/30/95
CONTROL NO.: EVBLK03 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	117	68-120

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: WATER

BATCH NO.:	95E084	DATE RECEIVED:	NA
SAMPLE ID:	LCS1	DATE EXTRACTED:	NA
CONTROL NO.:	EVLCS03	DATE ANALYZED:	05/30/95

ACCESSION: 95E084

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS RECOVERY (%)
Benzene	50.0	56.4	113
Toluene	50.0	50.5	101
Ethylbenzene	50.0	52.8	106
Xylenes	150	159	106

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



SDG #95 E084



JACOBS ENGINEERING GROUP INC. 95 E084
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595-8856 FAX (303) 595-8857

G1

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS PW Pipeline Abandonment						LABORATORY NAME & ADDRESS: CANARY Inc.				
PROJECT NUMBER: 10X70100						630 Maple Avenue				
WBS CODE: 33020602		SUBCONTRACT / D.O. No.				Torrance, CA 90503			(310) 618-8889	
SAMPLE NUMBER	COLLECTION		SAMPLED BY INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	QC	CONDITION ON RECEIPT
	DATE	TIME								
1✓ PW-A 101601	5/17/95	15:17	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		T = 2°C
2✓ PW-A 101602	5/17/95	15:37	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
3✓ PW-A 101603	5/17/95	16:07	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
4✓ PW-A 101604	5/17/95	16:21	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
5✓ PW-A 101605	5/17/95	16:47	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
6✓ PW-A 101606	5/18/95	8:32	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
7✓ PW-A 101607	5/18/95	9:03	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
8✓ PW-A 101608	5/18/95	9:32	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
9✓ PW-A 101609	5/18/95	9:47	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310		
COMMENTS:										
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME					
<u>M. J. S. Gated</u>			5/18/95	12:00						
RECEIVED BY			DATE	TIME	RELINQUISHED BY					
<u>J. S. Gated</u>			5/19/95	08:50						
RECORD RETURNED BY			DATE	TIME						
			/ /	:						
					SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SDG # 95 E084



JACOBS ENGINEERING GROUP INC. 95 E084
 600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595-8855 FAX (303) 595-8857

C-1

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: WAS FW Pipeline Abandonment						LABORATORY NAME & ADDRESS: CKY Inc.					
PROJECT NUMBER: 10K70100						630 Maple Avenue					
WBS CODE: 33020602		SUBCONTRACT / D.O. No.				Torrance, CA 90503			(310) 618-8889		
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED		CO D O	CONDITION ON RECEIPT
	DATE	TIME									
10✓	FW-A 101701	5/18/95	10:24	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	T=2°C
11✓	FW-A 101702	5/18/95	10:57	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
12✓	FW-A 101703	5/18/95	11:35	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
13✓	FW-A 101704	5/18/95	11:51	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
14✓	FW-A 101705	5/18/95	12:04	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
15✓	FW-A 101706	5/18/95	12:20	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
16✓	FW-A 101707	5/18/95	12:39	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
17✓	FW-A 101708	5/18/95	13:00	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
18✓	FW-A 101709	5/18/95	13:14	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
COMMENTS: FW-A101701 durch FW-A101706 include 3 jars for MS/MSP's											
COLLECTED & RELEASED BY 			DATE 5/18/95	TIME 17:00	TURNAROUND TIME						
RECEIVED BY 			DATE 5/19/95	TIME 08:50	RELINQUISHED BY						
RECORD RETURNED BY			DATE 1/1	TIME :							
SHIPPING NUMBER:											

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SDG # 95 ED 84



JACOBS ENGINEERING GROUP INC. 95 ED 84
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 566 - 8856 FAX (303) 566 - 8857

G1/RGA4

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: MAS IW Pipeline Abandonment					LABORATORY NAME & ADDRESS: CKY Inc.				
PROJECT NUMBER: 10K70100					630 Maple Avenue				
WBS CODE: 33020602		SUBCONTRACT / D.O. No.			Torrance, CA 90503			(310) 618-8889	
SAMPLE NUMBER	COLLECTION DATE	TIME	SAMPLE INITIALS	NUMBER OF CONTAINERS	CONTAINER TYPE	TESTS REQUESTED	ANALYSES REQUESTED	DATE RECEIVED	CONDITION ON RECEIPT
19- PV-A 102601 20 2001	5/18/95	16:02	mj	2	40ml Vial	HgI	W	E418.1 mj	SW8020 mj
20- PV-A 102602 2002	5/18/95	16:02	mj	1	1L Amber	H ₂ SO ₄	W	E418.1 mj	SW8020 mj
21- PV-A 102603 2003	5/18/95	16:02	mj	2	40ml Vial	HgI	W	E418.1 mj	SW8020 mj
22- PV-A 102604 2004	5/18/95	16:02	mj	1	1L Amber	NasS ₂ O ₂	W	E418.1 mj	SW8020 mj
PV-A 102605								E418.1	SW8020 SW8310
PV-A 102606								E418.1	SW8020 SW8310
PV-A 102607								E418.1	SW8020 SW8310
PV-A 102608								E418.1	SW8020 SW8310
PV-A 102609								E418.1	SW8020 SW8310

COMMENTS:

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME	RECEIVED BY	DATE	TIME	RELINQUISHED BY	DATE	TIME
<i>[Signature]</i>	5/19/95	17:00		<i>[Signature]</i>	5/19/95	08:50			
RECORD RETURNED BY	DATE	TIME		SHIPPING NUMBER:					
	/ /	:							

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SAMPLE RECEIPT FORM

CONTROL NO.	95E084			DATE	05-19-95	
CLIENT	STACOS ENGENIERIA NAS FW PIPELINE Abandonment			TIME	8:50 AM	
PROJECT				RECIPIENT	I. PATEL	
SAMPLE TRANSPORTATION TO CKY LABORATORY:	BY	ON(DATE)	AT(TIME)	FROM(SITE/CO.)	COMMENTS	
PICKED-UP BY CKY COURIER						
DELIVERED BY CLIENT						
SHIPPED/AIRBILL NO	FED EX APTN: 2894328614, SET-AIRBILL					
SAMPLE BATCH PACKAGING/SEALING UPON RECEIPT:				NO CONTAINER	DAMAGED	NOT SEALED
CONTAINER:	INSIDE TEMPERATURE:	25 C	CUSTODY SEAL /OTHER SEAL	INTACT	DAMAGED	SEALED
<input checked="" type="checkbox"/> COOLER	PACKAGING TYPE	SUFFICIENCY		<input checked="" type="checkbox"/> INTACT	<input checked="" type="checkbox"/> DAMAGED	<input checked="" type="checkbox"/> SEALED
BOX		OK				
— OTHER:	INSULATION:	RETRACTA	NAME:	SEE CO	REAR CLUTCH	SEALED
	ICE/COOLANT:		DATE:			
	PACKING MATERIAL:	STYRO	TIME:			
SAMPLE DOCUMENTATION/CHAIN-OF-CUSTODY(COC)				NONE	HANDCARRIED	ENCLOSED
SAMPLE LOG-IN:	CRITERIA	EVERY SAMPLE	NONE	ENCLOSED	FAXED	SEALED
SAMPLE CUSTODY SEAL	APPROPRIATE	OK				
CONTAINER TYPE/MATERIAL	ENOUGH					
SAMPLE AMOUNT	SUFFICIENT					
SAMPLE PRESERVATION/HOLDING TIME	ZERO/NONE					
HEADSPACE/BUBBLES	SUFFICIENT					
SAMPLE LABEL INFORMATION	SUFFICIENT					
CHAIN-OF-CUSTODY INFORMATION	SUFFICIENT					
SAMPLE INFO.: SAMPLE ID	DATE	TIME	SIGNATURE	ANALYSES	PRESERVATIVE	CONTAINER SEALED
INDIVIDUAL SAMPLE CONTAINER:	NONE		PLASTIC BAG	CAN	OTHER(SPECIFY):	ACTION
SAMPLE NUMBER	CLIENT ID	DISCREPANCY				
CLIENT SERVICES COPY RECEIVED BY						DATE
						TIME



ANALYSIS REQUEST FORM

CLIENT NAME: JEG FORT NORTH

CKY CONTROL NO.: 95 E084

REQUESTED BY: MIKE JOHNSON

DATE: 5/19/95

LOGGED BY: MERISSA

CKY CONTROL NO. **CLIENT S**

95E084

CLIENT SAMPLE ID

COMMENTS

CANCEL all 8310

analyses



RECEIVED
2000

**CKY incorporated
Analytical Laboratories**

Date: 06-26-95
CKY Batch No.: 95E086

RECEIVED

Attn: Lynn Schuetter

JUN 27 1995

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

JE • Denver

Subject: Revised Laboratory Report
Project: NAS FW Pipeline Aban. 10K70100

Enclosed is the revised laboratory report for samples received on 05/22/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include:

Sample ID	Control No.	Matrix	Analysis
FW-A 101801	E086-01	Soil	EPA 8020
FW-A 101802	E086-02	Soil	EPA 8020
FW-A 101803	E086-03	Soil	EPA 8020
FW-A 101804	E086-04	Soil	EPA 8020
FW-A 101805	E086-05	Soil	EPA 8020
FW-A 101806	E086-06	Soil	EPA 8020

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101801 DATE ANALYZED: 05/30/95
CONTROL NO.: E086-01 MATRIX: SOIL
% MOISTURE: 9.24 DILUTION FACTOR: 1
=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	55
Toluene	ND	55
Ethylbenzene	ND	55
Total Xylenes	ND	165
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	85	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101802 DATE ANALYZED: 05/30/95
CONTROL NO.: E086-02 MATRIX: SOIL
% MOISTURE: 7.59 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	54
Toluene	ND	54
Ethylbenzene	ND	54
Total Xylenes	ND	162
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	120	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS.



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101803 DATE ANALYZED: 05/30/95
CONTROL NO.: E086-03 MATRIX: SOIL
% MOISTURE: 17.22 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	60
Toluene	ND	60
Ethylbenzene	ND	60
Total Xylenes	ND	180
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	110	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS.

EPA METHOD 8020
BTEX

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101804 DATE ANALYZED: 05/31/95
CONTROL NO.: E086-04 MATRIX: SOIL
% MOISTURE: 11.16 DILUTION FACTOR: 1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	170
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

PQL: Practical Quantitation Limit
Confirmed by GC/MS.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101805 DATE ANALYZED: 05/31/95
CONTROL NO.: E086-05 MATRIX: SOIL
% MOISTURE: 8.62 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	55
Toluene	ND	55
Ethylbenzene	ND	55
Total Xylenes	ND	164
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	91	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS.



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 05/19/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 05/22/95
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101806 DATE ANALYZED: 05/31/95
CONTROL NO.: E086-06 MATRIX: SOIL
% MOISTURE: 9.65 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	90
Toluene	ND	90
Ethylbenzene	ND	90
Total Xylenes	ND	166
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	104	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS.



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95E086 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 05/31/95
CONTROL NO.: EVBLK04 MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	95	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: SOIL

BATCH NO.: 95E086 DATE RECEIVED: 05/22/95
 SAMPLE ID: FW-A 101803 DATE EXTRACTED: NA
 CONTROL NO.: E086-03 DATE ANALYZED: 05/30/95

ACCESSION: 95E086

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	MS % REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	MSD % REC	% RPD
Benzene	ND	60.20	54.30	90	60.20	54.50	91	0
Toluene	ND	60.20	42.80	71	60.20	37.80	63	12
Ethylbenzene	ND	60.20	38.00	63	60.20	31.30	52	+ 19
Xylenes	ND	181	107	59	181	89	49	+ 18

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

NOTE: + Matrix interference.



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
MATRIX: SOIL

BATCH NO.: 95E086 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: EVLCS04 DATE ANALYZED: 05/31/95

ACCESSION: 95E086

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	50.0	56.3		113
Toluene	50.0	49.9		100
Ethylbenzene	50.0	51.9		104
Xylenes	150	154		103

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Total Xylenes	81-129



SDG #95 ED 86

95 ED 86

G1

369 299



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 566-8856 FAX (303) 565-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS TW Pipeline Abandonment						LABORATORY NAME & ADDRESS: CKY Inc.				
PROJECT NUMBER: 10K70100						630 Maple Avenue				
WBS CODE: 33020602		SUBCONTRACT / D.O. No.				Torrance, CA 90503			(310) 618-8889	
SAMPLE NUMBER	COLLECTION DATE	TIME	SAMPLES INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVE DATE	MATRIX CODE	ANALYSES REQUESTED	O	CONDITION ON RECEIPT
1 IV-A 101801	5/19/95	15:20	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	T = 4°C ✓
2 IV-A 101802	5/19/95	15:28	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
3 IV-A 101803	5/19/95	15:37	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
4 IV-A 101804	5/19/95	15:46	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
5 IV-A 101805	5/19/95	16:00	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
6 IV-A 101806	5/19/95	16:11	mg mg	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
IV-A 101807				2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
IV-A 101808				2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	
IV-A 101809				2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310	

COMMENTS:

COLLECTED & RELEASED BY <i>M. Palmer</i>	DATE 5/19/95	TIME 13:14	TURNAROUND TIME 1 days
RECEIVED BY <i>J. Palmer</i>	DATE 5/22/95	TIME 10:00 AM	RELINQUISHED BY
RECORD RETURNED BY	DATE / /	TIME / /	
			SHIPPING NUMBER:

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD



*CKY incorporated
Analytical Laboratories*

Date: 06-26-1995
CKY Batch No.: 95F015

RECEIVED

JUN 27 1995

Attn: Lynn Schuetter

JE • Denver

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

Subject: Laboratory Report
Project: NAS FW Pipeline Aban. 10K70100

Enclosed is the Laboratory report for samples received on
06/03/95. The samples were received in coolers with ice and
intact; the chain-of-custody forms were properly filled out.
The data reported include :

Sample ID	Control No.	Matrix	Analysis
FW-A 101901	F015-01	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 101902	F015-02	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 101903	F015-03	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 101904	F015-04	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 101905	F015-05	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 101906	F015-06	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 101907	F015-07	Soil	EPA 8020

Sample ID	Control No.	Matrix	Analysis
			EPA 418.1
			EPA 8310
FW-A 101908	F015-08	Soil	EPA 8020
			EPA 418.1
FW-A 101909	F015-09	Soil	EPA 8310
			EPA 8020
FW-A 102101	F015-10	Soil	EPA 418.1
			EPA 8310
FW-A 102102	F015-11	Soil	EPA 8020
			EPA 418.1
FW-A 102103	F015-12	Soil	EPA 8020
			EPA 418.1
FW-A 102401	F015-13	Soil	EPA 8020
			EPA 418.1
FW-A 102402	F015-14	Soil	EPA 8020
			EPA 418.1
FW-A 102403	F015-15	Soil	EPA 8020
			EPA 418.1

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

K.Y. Pang
Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101901 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-01 MATRIX: SOIL
% MOISTURE: 18.23 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	183
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	125	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101902 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-02 MATRIX: SOIL
% MOISTURE: 16.61 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	60
Toluene	ND	60
Ethylbenzene	ND	60
Total Xylenes	ND	180
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	101	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101903 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-03 MATRIX: SOIL
% MOISTURE: 16.64 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	60
Toluene	ND	60
Ethylbenzene	ND	60
Total Xylenes	ND	180
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	76	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101904 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-04 MATRIX: SOIL
% MOISTURE: 16.10 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	60
Toluene	ND	60
Ethylbenzene	ND	60
Total Xylenes	ND	179
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	125	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101905 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-05 MATRIX: SOIL
% MOISTURE: 15.27 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	177
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	130	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101906 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-06 MATRIX: SOIL
% MOISTURE: 14.51 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	58
Toluene	ND	58
Ethylbenzene	ND	58
Total Xylenes	ND	175
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	132	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101907 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-07 MATRIX: SOIL
% MOISTURE: 18.34 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	184
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	67	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101908 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-08 MATRIX: SOIL
% MOISTURE: 11.31 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	169
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	66	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 101909 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-09 MATRIX: SOIL
% MOISTURE: 18.90 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	62
Toluene	ND	62
Ethylbenzene	ND	62
Total Xylenes	ND	185
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	89	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102101 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-10 MATRIX: SOIL
% MOISTURE: 18.30 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	184
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	61	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102102 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-11 MATRIX: SOIL
% MOISTURE: 15.23 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	177
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	78	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102103 DATE ANALYZED: 06/06/95
CONTROL NO.: F015-12 MATRIX: SOIL
% MOISTURE: 11.61 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	57
Toluene	ND	57
Ethylbenzene	ND	57
Total Xylenes	ND	170
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	113	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102401 DATE ANALYZED: 06/07/95
CONTROL NO.: F015-13 MATRIX: SOIL
% MOISTURE: 14.73 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	176
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	84	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102402 DATE ANALYZED: 06/07/95
CONTROL NO.: F015-14 MATRIX: SOIL
% MOISTURE: 11.19 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	169
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	128	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102403 DATE ANALYZED: 06/07/95
CONTROL NO.: F015-15 MATRIX: SOIL
% MOISTURE: 10.27 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	167
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	97	47-135

=====

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 06/06/95
CONTROL NO.: BLK0606A MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	81	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95F015 DATE EXTRACTED: NA
SAMPLE ID: VBLK02 DATE ANALYZED: 06/07/95
CONTROL NO.: BLK0607A MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	104	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA 8020
 MATRIX: SOIL

BATCH NO.: 95F015 DATE RECEIVED: 06/03/95
 SAMPLE ID: FW-A 101901 DATE EXTRACTED: NA
 CONTROL NO.: F015-01 DATE ANALYZED: 06/06/95

ACCESSION: 95F015

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% MS REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% MSD REC	% RPD
Benzene	ND	305	326	107	305	321	105	2
Toluene	ND	305	273	90	305	262	86	4
Ethylbenzene	ND	305	281	92	305	272	89	3
Xylenes	27.1	915	824	87	915	821	87	0

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

- CLIENT: Jacobs Engineering, Inc.
- PROJECT: NAS FW Pipeline Aban. 10K70100
- METHOD: EPA 8020
- MATRIX: SOIL

BATCH NO.: 95F015 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: NA
CONTROL NO.: LCS0606A DATE ANALYZED: 06/06/95

ACCESSION: 95F014 95F015

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	50.00	57.00		114
Toluene	50.00	49.60		99
Ethylbenzene	50.00	52.00		104
Xylenes	150	157		105

- QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
MATRIX: SOIL

=====

BATCH NO.: 95F015 DATE RECEIVED: NA
SAMPLE ID: LCS2 DATE EXTRACTED: NA
CONTROL NO.: LCS0607A DATE ANALYZED: 06/07/95
ACCESSION: 95F015

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	50.00	54.50		109
Toluene	50.00	48.00		96
Ethylbenzene	50.00	50.30		101
Xylenes	150	152		101

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



EPA METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBON

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/01/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F015	DATE EXTRACTED:	06/06/95
MATRIX:	SOIL	DATE ANALYZED:	06/09/95

=====

SAMPLE ID	CONTROL NO	RESULT (mg/kg)	DL FACTOR	MOIST (%)	PQL (mg/kg)
FW-A 101901	F015-01	ND	1	18.23	37
FW-A 101902	F015-02	ND	1	16.61	36
FW-A 101903	F015-03	ND	1	16.64	36
FW-A 101904	F015-04	66	1	16.10	36
FW-A 101905	F015-05	440	2	15.27	71
FW-A 101906	F015-06	ND	1	14.51	35
FW-A 101907	F015-07	ND	1	18.34	37
FW-A 101908	F015-08	ND	1	11.31	34
FW-A 101909	F015-09	ND	1	18.90	37
FW-A 102101	F015-10	ND	1	18.30	37
FW-A 102102	F015-11	240	1	15.23	35
FW-A 102103	F015-12	300	1	11.61	34
FW-A 102401	F015-13	39	1	14.73	35
FW-A 102402	F015-14	610	2	11.19	68
FW-A 102403	F015-15	280	1	10.27	33
TBLK01	F015-B1S	ND	1	NA	30

PQL : Practical Quantitation Limit

Collection Date: 06/02/95 for F015-09 to F015-15



CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL
% MOISTURE: 18.23

BATCH NO.: 95F015 DATE RECEIVED: 06/03/95
SAMPLE ID: FW-A 101901 DATE EXTRACTED: 06/06/95
CONTROL NO.: F015-01 DATE ANALYZED: 06/08/95

ACCESSION: 95F015

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	MS CONC (mg/kg)	% MS REC	SPIKE ADDED (mg/kg)	MSD CONC (mg/kg)	% MSD REC	% RPD
TRPH	ND	183	190	104	183	183	100	4



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL

BATCH NO.: 95F015 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: 06/06/95
CONTROL NO.: F015-L1S DATE ANALYZED: 06/08/95

ACCESSION: 95F015

PARAMETER	TRUE VALUE (mg/kg)	FOUND VALUE (mg/kg)	LCS RECOVERY (%)
TRPH	150	160	107

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/01/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F015	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 101901	DATE ANALYZED:	06/07/95
CONTROL NO.:	F015-01	MATRIX:	SOIL
% MOISTURE:	18.23	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	105	30-140

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F015 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 101902 DATE ANALYZED: 06/07/95
 CONTROL NO.: F015-02 MATRIX: SOIL
 % MOISTURE: 16.61 DILUTION FACTOR: 5
 =====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	78
Acenaphtylene	ND	300
Anthracene	200	78
Benzo(a)anthracene	210	78
Benzo(b)fluoranthene	ND	78
Benzo(k)fluoranthene	ND	78
Benzo(g,h,i)perylene	ND	78
Benzo(a)pyrene	ND	78
Chrysene	ND	78
Dibenzo(a,h)anthracene	ND	78
Fluoranthene	850	78
Fluorene	ND	78
Indeno(1,2,3-cd)pyrene	ND	78
Naphthalene	ND	78
Phenanthrene	ND	78
Pyrene	820	78
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	190+	30-140

=====
 PQL: Practical Quantitation Limit
 Confirmed by GC/MS
 + : Matrix interference



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/01/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F015	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 101903	DATE ANALYZED:	06/09/95
CONTROL NO.:	F015-03	MATRIX:	SOIL
% MOISTURE:	16.64	DILUTION FACTOR:	5

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	78
Acenaphtylene	ND	300
Anthracene	ND	78
Benzo(a)anthracene	570	78
Benzo(b)fluoranthene	ND	78
Benzo(k)fluoranthene	ND	78
Benzo(g,h,i)perylene	ND	78
Benzo(a)pyrene	ND	78
Chrysene	ND	78
Dibenzo(a,h)anthracene	ND	78
Fluoranthene	1200	78
Fluorene	ND	78
Indeno(1,2,3-cd)pyrene	ND	78
Naphthalene	ND	78
Phenanthrene	ND	78
Pyrene	750	78
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	190+	30-140

PQL: Practical Quantitation Limit
 Confirmed by GC/MS
 + : Matrix interference

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F015 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 101904 DATE ANALYZED: 06/09/95
 CONTROL NO.: F015-04 MATRIX: SOIL
 % MOISTURE: 16.10 DILUTION FACTOR: 20
 =====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	310
Acenaphtylene	ND	1192
Anthracene	ND	310
Benzo(a)anthracene	ND	310
Benzo(b)fluoranthene	ND	310
Benzo(k)fluoranthene	ND	310
Benzo(g,h,i)perylene	ND	310
Benzo(a)pyrene	ND	310
Chrysene	ND	310
Dibenzo(a,h)anthracene	ND	310
Fluoranthene	ND	310
Fluorene	ND	310
Indeno(1,2,3-cd)pyrene	ND	310
Naphthalene	ND	310
Phenanthrene	ND	310
Pyrene	380	310
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	DO	30-140

=====
 PQL: Practical Quantitation Limit
 Confirmed by GC/MS
 DO : Diluted out
 =====



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/01/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F015	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 101905	DATE ANALYZED:	06/09/95
CONTROL NO.:	F015-05	MATRIX:	SOIL
% MOISTURE:	15.27	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	59
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	111	30-140

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F015 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 101906 DATE ANALYZED: 06/09/95
 CONTROL NO.: F015-06 MATRIX: SOIL
 % MOISTURE: 14.51 DILUTION FACTOR: 1
 =====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	58
Anthracene	ND	15
Benzo(a)anthracene	40	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	84	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	121	30-140

=====
 PQL: Practical Quantitation Limit
 =====



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/01/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F015	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 101907	DATE ANALYZED:	06/07/95
CONTROL NO.:	F015-07	MATRIX:	SOIL
% MOISTURE:	18.34	DILUTION FACTOR:	1

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(q,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	91	30-140

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: 06/06/95
SAMPLE ID: FW-A 101908 DATE ANALYZED: 06/07/95
CONTROL NO.: F015-08 MATRIX: SOIL
% MOISTURE: 11.31 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	56
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	114	30-140

=====

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F015 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 101909 DATE ANALYZED: 06/07/95
 CONTROL NO.: F015-09 MATRIX: SOIL
 % MOISTURE: 18.90 DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	62
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	130	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F015 DATE EXTRACTED: 06/06/95
SAMPLE ID: FW-A 102101 DATE ANALYZED: 06/07/95
CONTROL NO.: F015-10 MATRIX: SOIL
% MOISTURE: 18.30 DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	117	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	NA
BATCH NO.:	95F015	DATE EXTRACTED:	06/06/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	06/06/95
CONTROL NO.:	F014-B1S	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	13
Acenaphtylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1,2,3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	107	30-140

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA METHOD 8310
 MATRIX: SOIL

BATCH NO.: 95F015 DATE RECEIVED: NA
 SAMPLE ID: FW-A 102208 DATE EXTRACTED: 06/06/95
 CONTROL NO.: F014-08 DATE ANALYZED: 06/06/95

ACCESSION: 95F014 95F015

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% REC	% RPD
Naphthalene	ND	112	109	97	112	111	99	2
Phenanthrene	ND	112	112	100	112	111	99	1
Pyrene	ND	112	102	91	112	100	89	1
Benzo(a)pyrene	ND	112	80	71	112	80	71	0

QC LIMIT: 30-140 30-140



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: NA

BATCH NO.: 95F015 DATE RECEIVED: NA
 SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 06/06/95
 CONTROL NO.: F014-L1S/1D DATE ANALYZED: 06/07/95

ACCESSION: 95F014 95F015

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	LCS CONC (ug/kg)	LCS % REC	SPIKE ADDED (ug/kg)	LCSD CONC (ug/kg)	LCSD % REC	% RPD
Naphthalene	ND	100	99	99	100	101	101	2
Phenanthrene	ND	100	102	102	100	103	103	1
Pyrene	ND	100	94	94	100	96	96	1
Benzo(a)pyrene	ND	100	78	78	100	77	77	1

QC LIMIT: 30-140 30-140

SDG #95 F015

95 F015

H6



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 595-8855 FAX (303) 595-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS PW Pipeline Abandonment						LABORATORY NAME & ADDRESS: CKY Inc.				
PROJECT NUMBER: 10K70100						630 Maple Avenue				
WBS CODE: 33020602		SUBCONTRACT / D.O. No.				Torrance, CA 90503 (310) 618-8889				
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED		C ON RECEIPT
	DATE	TIME								
1 ✓	PW-A 101901	6/1/95	15:40	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	T=4° C ✓
2 ✓	PW-A 101902	6/1/95	16:02	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
3 ✓	PW-A 101903	6/1/95	16:22	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
4 ✓	PW-A 101904	6/1/95	16:40	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
5 ✓	PW-A 101905	6/1/95	16:58	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
6 ✓	PW-A 101906	6/1/95	17:18	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
7 ✓	PW-A 101907	6/1/95	17:31	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
8 ✓	PW-A 101908	6/1/95	17:46	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
9 ✓	PW-A 101909	6/2/95	8:31	mj	2	4 oz. Glass	4° C	S	E418.1 SW8020 SW8310	✓
COMMENTS:										
COLLECTED & RELEASED BY <i>Michael J. S.</i>			DATE 6/2/95 20:00	TIME	TURNAROUND TIME					
RECEIVED BY <i>Stefan</i>			DATE 6/13/95	TIME 9:30	RELINQUISHED BY			DATE / /	TIME / /	
RECORD RETURNED BY			DATE / /	TIME / /	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SDG # 95F015

95F015

H6



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 565 - 8855 FAX (303) 565 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: MAS PW Pipeline Abandonment					LABORATORY NAME & ADDRESS: CKY Inc.				
PROJECT NUMBER: 10X70100					630 Maple Avenue				
WBS CODE: 33020602		SUBCONTRACT / D.O. No.			Torrance, CA 90503			(310) 618-8889	
SAMPLE NUMBER	COLLECTION	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	O	CONDITION ON RECEIPT
10	IV-A 102101	1/2 kgs	11:25 mg	2 4 oz. Glass	4° C	S	B418.1 SW8020 SW8310		T = 4° C
11	IV-A 102102	6/2 kgs	16:12 mg	1 4 oz. Glass	4° C	S	B418.1 SW8020		
12	IV-A 102103	6/2 kgs	17:52 mg	1 4 oz. Glass	4° C	S	B418.1 SW8020		
	IV-A 102104			2 4 oz. Glass	4° C	S	B418.1 SW8020		
	IV-A 102105			2 4 oz. Glass	4° C	S	B418.1 SW8020		
	IV-A 102106			2 4 oz. Glass	4° C	S	B418.1 SW8020		
	IV-A 102107			2 4 oz. Glass	4° C	S	B418.1 SW8020		
	IV-A 102108			2 4 oz. Glass	4° C	S	B418.1 SW8020		
	IV-A 102109			2 4 oz. Glass	4° C	S	B418.1 SW8020		

COMMENTS:

COLLECTED & RELEASED BY <i>Michael</i>	DATE 6/29/95	TIME 20:00	TURNAROUND TIME
RECEIVED BY <i>Slater</i>	DATE 6/30/95	TIME 9:30	RELINQUISHED BY
RECORD RETURNED BY	DATE / /	TIME :	
			SHIPPING NUMBER:

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SDG # 95F015

95F015

HG



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 565-8855 FAX (303) 565-8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: MAS TW Pipeline Abandonment				LABORATORY NAME & ADDRESS: CKY Inc.					
PROJECT NUMBER: 10K70100				630 Maple Avenue					
WBS CODE: 33020602		SUBCONTRACT / D.D. No.			Torrance, CA 90503			(310) 618-8889	
SAMPLE NUMBER	COLLECTION DATE	TIME	SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	G C CONDITION ON RECEIPT
IV-A 102401	6/2/95	17:54	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	T=4° C 2
IV-A 102402	6/2/95	17:58	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	
IV-A 102403	6/2/95	18:03	mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	
IV-A 102404				2	4 oz. Glass	4° C	S	E418.1 SW8020	
IV-A 102405				2	4 oz. Glass	4° C	S	E418.1 SW8020	
IV-A 102406				2	4 oz. Glass	4° C	S	E418.1 SW8020	
IV-A 102407				2	4 oz. Glass	4° C	S	E418.1 SW8020	
IV-A 102408				2	4 oz. Glass	4° C	S	E418.1 SW8020	
IV-A 102409				2	4 oz. Glass	4° C	S	E418.1 SW8020	

COMMENTS:

COLLECTED & RELEASED BY	DATE	TIME	TURNAROUND TIME
<i>Milne</i>	6/2/95	20:00	
RECEIVED BY	DATE	TIME	RELINQUISHED BY
<i>D. Satchel</i>	6/3/95	9:30	
RECORD RETURNED BY	DATE	TIME	
	1/1	:	
			SHIPPING NUMBER:

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

Batch No: 95F-14 / 95F-15
Control Number: _____
Method: _____
Matrix: Soil / Water

CORRECTIVE ACTION FORM

- 1). Nature of Discrepancy: *on COC*

- Sampling time for samples FW-A-102206, FW-A-102207 and FW-A-101902 do not correspond to sampling time on bottle.

- 2). Corrective Action Taken:

Inform Mike Johnson.

- 3). Result of Corrective Action:

per Mike Johnson, COC sampling times are correct and should be followed.

Approved by:

Signature: W
Date: 6/6/95

- 4). Further Corrective Action Taken ? Yes No ✓ Date:

SAMPLE RECEIPT FORM

CONTROL NO.	95FO 15			DATE	06-03-95			
CLIENT	JACOB'S ENGENIERIE NASHUA PIPE LINE AB.			TIME	9:30			
PROJECT				RECIPIENT	I. PARTZ			
SAMPLE TRANSPORTATION TO CKY LABORATORY:				BY	ON(DATE)	AT(TIME)	FROM(SITE/CO.)	COMMENTS
PICKED - UP BY CKY COURIER								
DELIVERED BY CLIENT								
SHIPPED/AIRBILL NO FEDEX APTRN: 2894328566 / MPS 9491501-652 SEE AIR BILL								
SAMPLE BATCH PACKAGING/SEALING UPON RECEIPT:				NO CONTAINER	<input checked="" type="checkbox"/> INTACT	DAMAGED	<input checked="" type="checkbox"/> NOT SEALED	SEALED
CONTAINER:	INSIDE TEMPERATURE:			40 C	CUSTODY SEAL/OTHER SEAL	LOCATION	NUMBER	
2 COOLERS	✓	PACKAGING	TYPE	SUFFICIENCY	<input checked="" type="checkbox"/> INTACT	DAMAGED		
BOX		INSULATION:						
OTHER:		ICE/COOLANT:	REGULAR	01C				
		PACKING MATERIAL:	STYRO					
SAMPLE DOCUMENTATION/CHAIN -OF -CUSTODY(COC)				NONE	<input checked="" type="checkbox"/> HANDCARRIED	<input checked="" type="checkbox"/> ENCLOSED	<input checked="" type="checkbox"/> FAXED	SEALED
SAMPLE LOG-IN:				CRITERIA	DISCREPANCY			
SAMPLE CUSTODY SEAL				EVERY SAMPLE	NONE			
CONTAINER TYPE/MATERIAL				APPROPRIATE	OK			
SAMPLE AMOUNT				ENOUGH				
SAMPLE PRESERVATION/HOLDING TIME				SUFFICIENT				
HEADSPACE/BUBBLES				ZERO/NONE				
SAMPLE LABEL INFORMATION				SUFFICIENT	SEE BELOW			
CHAIN -OF -CUSTODY INFORMATION				SUFFICIENT				
SAMPLE INFO.:		SAMPLE ID	DATE	TIME	<input checked="" type="checkbox"/> SIGNATURE	PRESERVATIVE	CONTAINER	
INDIVIDUAL SAMPLE CONTAINER:			NONE	<input checked="" type="checkbox"/> PLASTIC BAG	CAN	OTHER(SPECIFY):	SEALED	ACTION
SAMPLE NUMBER	CLIENT ID	DISCREPANCY						
-2		S. TIME IS 14:02 ON THE CONTAINER'S LABEL						
CLIENT SERVICES COPY RECEIVED BY				DATE	TIME			



**C K Y incorporated
Analytical Laboratories**

Date: 06-26-1995
CKY Batch No.: 95F014

RECEIVED

Attn: Lynn Schuetter

JUN 27 1995

Jacobs Engineering, Inc.
600 Seventeenth St. Suite 1100N
Denver, CO 80202

JE • Denver

Subject: Laboratory Report
Project: NAS FW Pipeline Aban. 10K70100

Enclosed is the Laboratory report for samples received on 06/03/95. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported include :

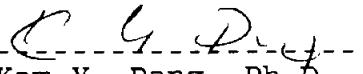
Sample ID	Control No.	Matrix	Analysis
FW-A 102201	F014-01	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 102202	F014-02	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 102203	F014-03	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 102204	F014-04	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 102205	F014-05	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 102206	F014-06	Soil	EPA 8020 EPA 418.1 EPA 8310
FW-A 102207	F014-07	Soil	EPA 8020

Sample ID	Control No.	Matrix	Analysis
			EPA 418.1
			EPA 8310
FW-A 102208	F014-08	Soil	EPA 8020
			EPA 418.1
			EPA 8310
FW-A 102208MS	F014-08S	Soil	EPA 8020
			EPA 418.1
			EPA 8310
FW-A 102208MSD	F014-08D	Soil	EPA 8020
			EPA 418.1
			EPA 8310
FW-A 102209	F014-09	Soil	EPA 8020
			EPA 418.1
			EPA 8310
FW-A 102301	F014-10	Soil	EPA 8020
			EPA 418.1
FW-A 102302	F014-11	Soil	EPA 8020
			EPA 418.1
FW-A 102303	F014-12	Soil	EPA 8020
			EPA 418.1
FW-A 102304	F014-13	Soil	EPA 8020
			EPA 418.1
FW-A 102305	F014-14	Soil	EPA 8020
			EPA 418.1
FW-A 102306	F014-15	Soil	EPA 8020
			EPA 418.1
FW-A 102307	F014-16	Soil	EPA 8020
			EPA 418.1
FW-A 102308	F014-17	Soil	EPA 8020
			EPA 418.1
FW-A 102309	F014-18	Soil	EPA 8020
			EPA 418.1
FW-A 102701	F014-19	Water	EPA 602
FW-A 102702	F014-20	Water	EPA 8310
FW-A 102703	F014-21	Water	EPA 418.1
FW-A 102704	F014-22	Water	EPA 602

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,


Kam Y. Pang, Ph.D.
Laboratory Director

P.S. - All analyses requested for the above referenced project have been completed. Therefore, unless instructed, the remaining portions of the samples will be disposed after fifteen (15) days from the date of this report.



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102201 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-01 MATRIX: SOIL
% MOISTURE: 17.59 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	182
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	93	47-135

=====

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102202 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-02 MATRIX: SOIL
% MOISTURE: 15.55 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	178
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	79	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102203 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-03 MATRIX: SOIL
% MOISTURE: 15.70 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	178
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	117	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102204 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-04 MATRIX: SOIL
% MOISTURE: 18.12 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	183
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	66	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102205 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-05 MATRIX: SOIL
% MOISTURE: 15.27 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	177
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	101	47-135

=====

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/02/96
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	NA
SAMPLE ID:	FW-A 102206	DATE ANALYZED:	06/05/95
CONTROL NO.:	F014-06	MATRIX:	SOIL
% MOISTURE:	6.46	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	53
Toluene	ND	53
Ethylbenzene	ND	53
Total Xylenes	ND	160

SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	81	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102207 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-07 MATRIX: SOIL
% MOISTURE: 19.38 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	62
Toluene	ND	62
Ethylbenzene	ND	62
Total Xylenes	ND	186
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	100	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102208 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-08 MATRIX: SOIL
% MOISTURE: 18.39 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	61
Toluene	ND	61
Ethylbenzene	ND	61
Total Xylenes	ND	184
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit



CKY INC., ANALYTICAL LABORATORIES, 630 Maple Ave., Torrance, Calif. 90503 Tel. (310) 618-8889 Fax: (310) 618-0818

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102208MS DATE ANALYZED: 06/05/95
CONTROL NO.: F014-08S MATRIX: SOIL
% MOISTURE: 18.39 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	311	61
Toluene	271	61
Ethylbenzene	279	61
Total Xylenes	838	184
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	74	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102208MSD DATE ANALYZED: 06/05/95
CONTROL NO.: F014-08D MATRIX: SOIL
% MOISTURE: 18.39 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	322	61
Toluene	269	61
Ethylbenzene	276	61
Total Xylenes	829	184
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	76	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102209 DATE ANALYZED: 06/05/95
CONTROL NO.: F014-09 MATRIX: SOIL
% MOISTURE: 16.61 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	60
Toluene	ND	60
Ethylbenzene	ND	60
Total Xylenes	ND	180
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	88	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102301 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-10 MATRIX: SOIL
% MOISTURE: 14.82 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	176
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	93	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102302 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-11 MATRIX: SOIL
% MOISTURE: 15.10 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	59
Toluene	ND	59
Ethylbenzene	ND	59
Total Xylenes	ND	177
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	88	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102303 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-12 MATRIX: SOIL
% MOISTURE: 10.38 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	167
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	124	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102304 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-13 MATRIX: SOIL
% MOISTURE: 13.16 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	58
Toluene	ND	58
Ethylbenzene	ND	58
Total Xylenes	ND	173
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	115	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102305 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-14 MATRIX: SOIL
% MOISTURE: 13.40 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	58
Toluene	ND	58
Ethylbenzene	ND	58
Total Xylenes	ND	173
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	95	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102306 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-15 MATRIX: SOIL
% MOISTURE: 11.65 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	57
Toluene	ND	57
Ethylbenzene	ND	57
Total Xylenes	ND	170
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	97	47-135

=====

PQL: Practical Quantitation Limit



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102307 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-16 MATRIX: SOIL
% MOISTURE: 10.88 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	168
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	120	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102308 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-17 MATRIX: SOIL
% MOISTURE: 9.98 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	167
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit
Confirmed by GC/MS

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102309 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-18 MATRIX: SOIL
% MOISTURE: 10.85 DILUTION FACTOR: 1
=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	56
Toluene	ND	56
Ethylbenzene	ND	56
Total Xylenes	ND	168
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	101	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: VBLK01 DATE ANALYZED: 06/05/95
CONTROL NO.: BLK0605A MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	96	47-135

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: VBLK02 DATE ANALYZED: 06/06/95
CONTROL NO.: BLK0606A MATRIX: SOIL
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	81	47-135

=====

PQL: Practical Quantitation Limit

**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
LATRIX: SOIL

BATCH NO.:	95F014	DATE RECEIVED:	06/03/95
SAMPLE ID:	FW-A 102208	DATE EXTRACTED:	NA
CONTROL NO.:	F014-08	DATE ANALYZED:	06/05/95

ACCESSION: 95F014 95F015

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% REC	% RPD
Benzene	ND	305	311	102	305	322	106	4
Toluene	ND	305	271	89	305	269	88	1
Ethylbenzene	ND	305	279	92	305	276	91	1
Xylenes	ND	915	838	92	915	829	91	1

QC LIMIT:

Benzene	57-129	57-129
Toluene	57-129	57-129
Ethylbenzene	66-126	66-126
Xylenes	81-129	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
MATRIX: SOIL

=====

BATCH NO.:	95F014	DATE RECEIVED:	NA
SAMPLE ID:	LCS1	DATE EXTRACTED:	NA
CONTROL NO.:	LCS0605A	DATE ANALYZED:	06/05/95

ACCESSION: 95F014 95F015

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS RECOVERY (%)
Benzene	50.00	56.50	113
Toluene	50.00	46.70	93
Ethylbenzene	50.00	48.50	97
Xylenes	150	146	97

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

- CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
MATRIX: SOIL

=====

BATCH NO.: 95F014 DATE RECEIVED: NA
SAMPLE ID: LCS2 DATE EXTRACTED: NA
CONTROL NO.: LCS0606A DATE ANALYZED: 06/06/95

ACCESSION: 95F014 95F015

PARAMETER	TRUE VALUE (ug/kg)	FOUND VALUE (ug/kg)	LCS	RECOVERY (%)
Benzene	50.00	57.00		114
Toluene	50.00	49.60		99
Ethylbenzene	50.00	52.00		104
Xylenes	150	157		105

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129



EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102701 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-19 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	83	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: FW-A 102704 DATE ANALYZED: 06/06/95
CONTROL NO.: F014-22 MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	6
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	80	68-120

=====

PQL: Practical Quantitation Limit

EPA METHOD 8020
BTEX

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: NA
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: NA
BATCH NO.: 95F014 DATE EXTRACTED: NA
SAMPLE ID: VBLK03 DATE ANALYZED: 06/06/95
CONTROL NO.: BLK0606A MATRIX: WATER
% MOISTURE: NA DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/L)	PQL (ug/L)
Benzene	ND	50
Toluene	ND	50
Ethylbenzene	ND	50
Total Xylenes	ND	150
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
Bromofluorobenzene	81	47-135

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

- CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA 8020
MATRIX: WATER

=====

BATCH NO.: 95F014 DATE RECEIVED: NA
SAMPLE ID: LCS3 DATE EXTRACTED: NA
CONTROL NO.: LCS0606A DATE ANALYZED: 06/06/95
ACCESSION: 95F014 95F015

PARAMETER	TRUE VALUE (ug/L)	FOUND VALUE (ug/L)	LCS RECOVERY (%)
Benzene	50.00	57.00	114
Toluene	50.00	49.60	99
Ethylbenzene	50.00	52.00	104
Xylenes	150	157	105

QC LIMIT:

Benzene	57-129
Toluene	57-129
Ethylbenzene	66-126
Xylenes	81-129

EPA METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBON

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F014 DATE EXTRACTED: 06/06/95
 MATRIX: SOIL DATE ANALYZED: 06/08/95
 =====

SAMPLE ID	CONTROL NO	RESULT (mg/kg)	DL FACTOR	MOIST (%)	PQL (mg/kg)
FW-A 102201	F014-01	ND	1	17.59	36
FW-A 102202	F014-02	110	1	15.55	36
FW-A 102203	F014-03	ND	1	15.70	36
FW-A 102204	F014-04	ND	1	18.12	37
FW-A 102205	F014-05	ND	1	15.27	35
FW-A 102206	F014-06	ND	1	6.46	32
FW-A 102207	F014-07	330	1	19.38	37
FW-A 102208	F014-08	ND	1	18.39	37
FW-A 102209	F014-09	ND	1	16.61	36
FW-A 102301	F014-10	ND	1	14.82	35
FW-A 102302	F014-11	220	1	15.10	35
FW-A 102303	F014-12	170	1	10.38	33
FW-A 102304	F014-13	110	1	13.16	35
FW-A 102305	F014-14	130	1	13.40	35
FW-A 102306	F014-15	220	1	11.65	34
FW-A 102307	F014-16	460	2	10.88	67
FW-A 102308	F014-17	450	2	9.98	67
FW-A 102309	F014-18	240	1	10.85	34
TBLK01	F014-B1S	ND	1	NA	30

PQL : Practical Quantitation Limit

CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL
MOISTURE: 18.39

BATCH NO.: 95F014 DATE RECEIVED: 06/03/95
SAMPLE ID: FW-A 102208 DATE EXTRACTED: 06/06/95
CONTROL NO.: F014-08 DATE ANALYZED: 06/08/95

ACCESSION: 95F014

Parameter	SAMPLE CONC (mg/kg)	SPIKE ADDED (mg/kg)	MS CONC (mg/kg)	% MS REC	SPIKE ADDED (mg/kg)	MSD CONC (mg/kg)	% MSD REC	% RPD
CRPH	ND	184	194	105	184	199	108	3

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 418.1
MATRIX: SOIL

BATCH NO.: 95F014 DATE RECEIVED: NA
SAMPLE ID: LCS1 DATE EXTRACTED: 06/06/95
CONTROL NO.: F014-L1S DATE ANALYZED: 06/08/95

ACCESSION: 95F014

PARAMETER	TRUE VALUE (mg/kg)	FOUND VALUE (mg/kg)	LCS	RECOVERY (%)
TRPH	150	166		111

EPA METHOD 418.1
TOTAL RECOVERABLE PETROLEUM HYDROCARBON

=====

CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/01/96
PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
BATCH NO.: 95F014 DATE EXTRACTED: 06/06/95
MATRIX: WATER DATE ANALYZED: 06/08/95

=====

SAMPLE ID	CONTROL NO	RESULT (ug/L)	DILUTION FACTOR	PQL (ug/L)
FW-A 102703 TBLK01	F014-21 F014-B1W	ND ND	1 1	1000 1000

PQL : Practical Quantitation Limit



**CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA METHOD 418.1
 MATRIX: WATER

BATCH NO.: 95F014 DATE RECEIVED: NA
 SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 06/06/95
 CONTROL NO.: F014L1W/1D DATE ANALYZED: 06/08/95

ACCESSION: 95F014

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	LCS % REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC	% RPD
TRPH	ND	15000	15800	105	15000	15600	104	1

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/02/96
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 102201	DATE ANALYZED:	06/06/95
CONTROL NO.:	F014-01	MATRIX:	SOIL
% MOISTURE:	17.59	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	POL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	105	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/02/96
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 102202	DATE ANALYZED:	06/07/95
CONTROL NO.:	F014-02	MATRIX:	SOIL
% MOISTURE:	15.55	DILUTION FACTOR:	10

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	154
Acenaphtylene	ND	592
Anthrâcene	ND	154
Benzo(a)anthracene	ND	154
Benzo(b)fluoranthene	ND	154
Benzo(k)fluoranthene	ND	154
Benzo(g,h,i)perylene	ND	154
Benzo(a)pyrene	ND	154
Chrysene	ND	154
Dibenzo(a,h)anthracene	ND	154
Fluoranthene	400	154
Fluorene	ND	154
Indeno(1,2,3-cd)pyrene	ND	154
Naphthalene	380	154
Phénanthrene	ND	154
Pyrene	240	154
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	162+	30-140

PQL: Practical Quantitation Limit

Confirmed by GC/MS

+ : Matrix interference



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EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F014 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 102203 DATE ANALYZED: 06/06/95
 CONTROL NO.: F014-03 MATRIX: SOIL
 % MOISTURE: 15.70 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	59
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	96	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/02/96
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 102204	DATE ANALYZED:	06/06/95
CONTROL NO.:	F014-04	MATRIX:	SOIL
% MOISTURE:	18.12	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenz(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	113	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

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CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/02/96
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 102205	DATE ANALYZED:	06/06/95
CONTROL NO.:	F014-05	MATRIX:	SOIL
% MOISTURE:	15.27	DILUTION FACTOR:	1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	15
Acenaphtylene	ND	59
Anthracene	ND	15
Benzo(a)anthracene	ND	15
Benzo(b)fluoranthene	ND	15
Benzo(k)fluoranthene	ND	15
Benzo(g,h,i)perylene	ND	15
Benzo(a)pyrene	ND	15
Chrysene	ND	15
Dibenzo(a,h)anthracene	ND	15
Fluoranthene	ND	15
Fluorene	ND	15
Indeno(1,2,3-cd)pyrene	ND	15
Naphthalene	ND	15
Phenanthrene	ND	15
Pyrene	ND	15
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	96	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F014 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 102206 DATE ANALYZED: 06/07/95
 CONTROL NO.: F014-06 MATRIX: SOIL
 % MOISTURE: 6.46 DILUTION FACTOR: 20

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	278
Acenaphtylene	ND	1069
Anthracene	ND	278
Benzo(a)anthracene	ND	278
Benzo(b)fluoranthene	ND	278
Benzo(k)fluoranthene	ND	278
Benzo(g,h,i)perylene	ND	278
Benzo(a)pyrene	ND	278
Chrysene	ND	278
Dibenzo(a,h)anthracene	ND	278
Fluoranthene	ND	278
Fluorene	ND	278
Indeno(1,2,3-cd)pyrene	ND	278
Naphthalene	4100	278
Phenanthrene	ND	278
Pyrene	ND	278
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	100	30-140

=====

PQL: Practical Quantitation Limit
 Confirmed by GC/MS

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/02/96
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 102207	DATE ANALYZED:	06/07/95
CONTROL NO.:	F014-07	MATRIX:	SOIL
% MOISTURE:	19.38	DILUTION FACTOR:	100

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	1613
Acenaphtylene	ND	6202
Anthracene	ND	1613
Benzo (a)anthracene	ND	1613
Benzo (b)fluoranthene	ND	1613
Benzo (k)fluoranthene	ND	1613
Benzo(g,h,i)perylene	ND	1613
Benzo(a)pyrene	ND	1613
Chrysene	ND	1613
Dibenzo(a,h)anthracene	ND	1613
Fluoranthene	ND	1613
Fluorene	ND	1613
Indeno(1,2,3-cd)pyrene	ND	1613
Naphthalene	ND	1613
Phenanthrene	ND	1613
Pyrene	ND	1613
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	DO	30-140

POL: Practical Quantitation Limit
 DO : Diluted out



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F014 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 102208 DATE ANALYZED: 06/06/95
 CONTROL NO.: F014-08 MATRIX: SOIL
 % MOISTURE: 18.39 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	102	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/95
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F014 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 102208MS DATE ANALYZED: 06/06/95
 CONTROL NO.: F014-08S MATRIX: SOIL
 % MOISTURE: 18.39 DILUTION FACTOR: 1

=====

PARAMETERS	RESULTS (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphthylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	87	16
Chrysene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	119	16
Phenanthrene	122	16
Pyrene	111	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	101	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/02/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 102208MSD	DATE ANALYZED:	06/06/95
CONTROL NO.:	F014-08D	MATRIX:	SOIL
% MOISTURE:	18.39	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	61
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g, h, i)perylene	ND	16
Benzo(a)pyrene	72	16
Chrysene	ND	16
Dibenzo(a, h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1, 2, 3-cd)pyrene	ND	16
Naphthalene	121	16
Phénanthrene	121	16
Pyrene	109	16
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	103	30-140

=====

PQL: Practical Quantitation Limit

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====
 CLIENT: Jacobs Engineering, Inc. DATE COLLECTED: 06/02/96
 PROJECT: NAS FW Pipeline Aban. 10K70100 DATE RECEIVED: 06/03/95
 BATCH NO.: 95F014 DATE EXTRACTED: 06/06/95
 SAMPLE ID: FW-A 102209 DATE ANALYZED: 06/06/95
 CONTROL NO.: F014-09 MATRIX: SOIL
 % MOISTURE: 16.61 DILUTION FACTOR: 1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	16
Acenaphtylene	ND	60
Anthracene	ND	16
Benzo(a)anthracene	ND	16
Benzo(b)fluoranthene	ND	16
Benzo(k)fluoranthene	ND	16
Benzo(g,h,i)perylene	ND	16
Benzo(a)pyrene	ND	16
Crycene	ND	16
Dibenzo(a,h)anthracene	ND	16
Fluoranthene	ND	16
Fluorene	ND	16
Indeno(1,2,3-cd)pyrene	ND	16
Naphthalene	ND	16
Phenanthrene	ND	16
Pyrene	ND	16
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	100	30-140

=====

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	NA
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	PBLK01	DATE ANALYZED:	06/06/95
CONTROL NO.:	F014-B1S	MATRIX:	SOIL
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/kg)	PQL (ug/kg)
Acenaphthene	ND	13
Acenaphtylene	ND	50
Anthracene	ND	13
Benzo(a)anthracene	ND	13
Benzo(b)fluoranthene	ND	13
Benzo(k)fluoranthene	ND	13
Benzo(g,h,i)perylene	ND	13
Benzo(a)pyrene	ND	13
Chrysene	ND	13
Dibenzo(a,h)anthracene	ND	13
Fluoranthene	ND	13
Fluorene	ND	13
Indeno(1, 2, 3-cd)pyrene	ND	13
Naphthalene	ND	13
Phenanthrene	ND	13
Pyrene	ND	13
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	107	30-140

=====

PQL: Practical Quantitation Limit

**CKY QUALITY CONTROL DATA
SPIKE/SPIKE DUPLICATE ANALYSIS**

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 MOISTURE: 18.39

BATCH NO.: 95F014 DATE RECEIVED: 06/03/95
 SAMPLE ID: FW-A 102208 DATE EXTRACTED: 06/06/95
 CONTROL NO.: F014-08 DATE ANALYZED: 06/06/95

ACCESSION: 95F014 95F015

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	MS CONC (ug/kg)	% REC	SPIKE ADDED (ug/kg)	MSD CONC (ug/kg)	% REC	% RPD
Naphthalene	ND	123	119	97	123	121	99	2
Phenanthrene	ND	123	122	99	123	121	99	0
Pyrene	ND	123	111	90	123	109	89	1
Benzo (a) pyrene	ND	123	87	71	123	89	72	2

QC LIMIT: 30-140 30-140



CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
 PROJECT: NAS FW Pipeline Aban. 10K70100
 METHOD: EPA METHOD 8310
 MATRIX: SOIL
 % MOISTURE: NA

BATCH NO.: 95F014 DATE RECEIVED: NA
 SAMPLE ID: LCS1/LCS1D DATE EXTRACTED: 06/06/95
 CONTROL NO.: F014-L1S/1D DATE ANALYZED: 06/07/95

ACCESSION: 95F014 95F015

Parameter	SAMPLE CONC (ug/kg)	SPIKE ADDED (ug/kg)	LCS CONC (ug/kg)	LCS % REC	SPIKE ADDED (ug/kg)	LCSD CONC (ug/kg)	LCSD % REC	% RPD
Naphthalene	ND	100	99	99	100	101	101	2
Phenanthrene	ND	100	102	102	100	103	103	1
Pyrene	ND	100	94	94	100	96	96	1
Benzo(a)pyrene	ND	100	78	78	100	77	77	1

QC LIMIT: 30-140 30-140

EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	06/01/95
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	06/03/95
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	FW-A 102702	DATE ANALYZED:	06/09/95
CONTROL NO.:	F014-20	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

PARAMETERS	results (ug/L)	PQL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
 SURROGATE PARAMETER	 % RECOVERY	 QC LIMIT
p-Terphenyl-d14	105	30-140

PQL: Practical Quantitation Limit



EPA METHOD 8310
POLYNUCLEAR AROMATIC HYDROCARBONS

=====

CLIENT:	Jacobs Engineering, Inc.	DATE COLLECTED:	NA
PROJECT:	NAS FW Pipeline Aban. 10K70100	DATE RECEIVED:	NA
BATCH NO.:	95F014	DATE EXTRACTED:	06/06/95
SAMPLE ID:	PBLK02	DATE ANALYZED:	06/09/95
CONTROL NO.:	F014-B1W	MATRIX:	WATER
% MOISTURE:	NA	DILUTION FACTOR:	1

=====

PARAMETERS	results (ug/L)	POL (ug/L)
Acenaphthene	ND	.25
Acenaphtylene	ND	1
Anthracene	ND	.25
Benzo(a)anthracene	ND	.25
Benzo(b)fluoranthene	ND	.25
Benzo(k)fluoranthene	ND	.25
Benzo(g,h,i)perylene	ND	.25
Benzo(a)pyrene	ND	.25
Chrysene	ND	.25
Dibenzo(a,h)anthracene	ND	.25
Fluoranthene	ND	.25
Fluorene	ND	.25
Indeno(1,2,3-cd)pyrene	ND	.25
Naphthalene	ND	.25
Phenanthrene	ND	.25
Pyrene	ND	.25
SURROGATE PARAMETER	% RECOVERY	QC LIMIT
p-Terphenyl-d14	103	30-140

=====

PQL: Practical Quantitation Limit

CKY QUALITY CONTROL DATA
LABORATORY CONTROL SAMPLE ANALYSIS

CLIENT: Jacobs Engineering, Inc.
PROJECT: NAS FW Pipeline Aban. 10K70100
METHOD: EPA METHOD 8310
MATRIX: WATER

BATCH NO.: 95F014 DATE RECEIVED: NA
SAMPLE ID: LCS2/LCS2D DATE EXTRACTED: 06/06/95
CONTROL NO.: F014-L1W/1D DATE ANALYZED: 06/09/95

ACCESSION: 95F014 95F15

Parameter	SAMPLE CONC (ug/L)	SPIKE ADDED (ug/L)	LCS CONC (ug/L)	LCS % REC	SPIKE ADDED (ug/L)	LCSD CONC (ug/L)	LCSD % REC	% RPD
Naphthalene	ND	2.00	1.81	91	2.00	1.79	90	1
Phenanthrene	ND	2.00	1.80	90	2.00	2.06	103	13
Pyrene	ND	2.00	2.15	108	2.00	2.18	109	1
Benzo(a)pyrene	ND	2.00	1.52	76	2.00	1.44	72	5

QC LIMIT: 30-140 30-140



369 396 SGD#95F014

95F014

H6/RGCC



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 695 - 8855 FAX (303) 695 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: MAS PW Pipeline Abandonment					LABORATORY NAME & ADDRESS: CKY Inc.						
PROJECT NUMBER: 10K70100					630 Maple Avenue						
WBS CODE: 33020602		SUBCONTRACT / D.O. No.			Torrance, CA 90503 (310) 618-8889						
SAMPLE NUMBER	COLLECTION		SAMPLES INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED		GC	CONDITION ON RECEIPT
	DATE	TIME									
1 ✓	MW-A 102201	6/2/95	8:48 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		T=4° C
2 ✓	MW-A 102202	6/2/95	9:02 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		
3 ✓	MW-A 102203	6/2/95	9:16 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		
4 ✓	MW-A 102204	6/2/95	9:31 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		
5 ✓	MW-A 102205	6/2/95	9:45 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		
6 ✓	MW-A 102206	6/2/95	9:57 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		
7 ✓	MW-A 102207	6/2/95	11:03 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		
8 ✓	MW-A 102208	6/2/95	11:17 mg	3	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310 M		
9 ✓	MW-A 102209	6/2/95	11:34 mg	2	4 oz. Glass	4° C	S	E418.1 SW8020	SW8310		
COMMENTS: MW-A 102208 has 3 containers for ms/msd.											
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME						
			6/2/95	7:00:00							
RECEIVED BY			DATE	TIME	RELINQUISHED BY						
			6/3/95	9:30							
RECORD RETURNED BY			DATE	TIME							
			1/1	:							
SHIPPING NUMBER:											

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

SD GH 95 F014

95 F014

H6/R6C6

369 397



JACOBS ENGINEERING GROUP INC.
600 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
TELEPHONE (303) 505 - 8855 FAX (303) 505 - 8857

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: NAS PW Pipeline Abandonment					LABORATORY NAME & ADDRESS: CXY Inc.					
PROJECT NUMBER: 10X70100					630 Maple Avenue					
WBS CODE: 33020602		SUBCONTRACT / D.O. No.			Torrance, CA 90503 (310) 618-8889					
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED		CONDITION ON RECEIPT
	DATE	TIME								
10 ✓	PW-A 102301	6/2/95	15:57	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	T=4°C ✓
11 ✓	PW-A 102302	6/2/95	16:07	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
12 ✓	PW-A 102303	6/2/95	16:25	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
13 ✓	PW-A 102304	6/2/95	16:31	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
14 ✓	PW-A 102305	6/2/95	16:38	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
15 ✓	PW-A 102306	6/2/95	16:47	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
16 ✓	PW-A 102307	6/2/95	16:56	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
17 ✓	PW-A 102308	6/2/95	17:04	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
18 ✓	PW-A 102309	6/2/95	17:42	mj	1/2	4 oz. Glass	4° C	S	E418.1 SW8020	
COMMENTS:										
COLLECTED & RELEASED BY			DATE	TIME	TURNAROUND TIME					
RECEIVED BY			DATE	TIME	RELINQUISHED BY			DATE	TIME	
RECORD RETURNED BY			DATE	TIME	SHIPPING NUMBER:					

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

369 398

SDG#95F014



JACOBS ENGINEERING GROUP INC. 95 F014
 800 SEVENTEENTH STREET, SUITE 1100N DENVER, COLORADO 80202
 TELEPHONE (303) 595 - 8855 FAX (303) 595 - 8857

H6 / RGCG

CHAIN OF CUSTODY RECORD

USE A BALLPOINT PEN, BLACK INK, AND PRESS FIRMLY. INSTRUCTIONS ARE ON THE BACK

PROJECT NAME: MAS FW Pipeline Abandonment					LABORATORY NAME & ADDRESS: CKY Inc.				
PROJECT NUMBER: 10X70100					630 Maple Avenue				
WBS CODE: 33020602		SUBCONTRACT / D.O. No.			Torrance, CA 90503			(310) 618-8889	
SAMPLE NUMBER	COLLECTION		SAMPLER'S INITIALS	NUMBER OF CONTAINERS	CONTAINER SIZE AND TYPE	PRESERVATIVE	MATRIX CODE	ANALYSES REQUESTED	G C CONDITION ON RECEIPT
19	6/1/95	18:54	mg	2	40 ml Vial	Hg	w	E418.1 SW8020 mg SW8310	T = 4°C g
20	6/1/95	18:54	mg	1	1L Amber	Hg2S2 O3	w	E418.1 SW8020 mg SW8310	1
21	6/1/95	18:54	mg	1	1L Amber	Hg SO4	w	E418.1 SW8020 mg SW8310	
22	6/1/95	18:54	mg	40 ml Vial		Hg	w	E418.1 SW8020 SW8310	
23	6/1/95							E418.1 SW8020 SW8310	
24	6/1/95							E418.1 SW8020 SW8310	
25	6/1/95							E418.1 SW8020 SW8310	
26	6/1/95							E418.1 SW8020 SW8310	
27	6/1/95							E418.1 SW8020 SW8310	
28	6/1/95							E418.1 SW8020 SW8310	
29	6/1/95							E418.1 SW8020 SW8310	
COMMENTS:									

COLLECTED & RELEASED BY 	DATE 6/2/95	TIME 20:00	TURNAROUND TIME
RECEIVED BY 	DATE 6/3/95	TIME 9:30	RELINQUISHED BY
RECORD RETURNED BY	DATE 1/1	TIME 11:11	
			SHIPPING NUMBER:

DISTRIBUTION: WHITE - PROJECT FILE / CANARY - LAB RECEIPT / PINK - DATA MANAGEMENT / GOLDENROD - FIELD

Appendix B

Control Number/Sample Identification Cross Reference			
Offsite Lab Control #	Sample Designation	Immunoassay BTEX Lab Batch #	Immunoassay PAH Lab Batch #
FW-A100101	DP 006A	BTEX01- 13	PAH01- 8
FW-A100102	DP 006B	BTEX01- 14	PAH01- 9
FW-A100103	Equipment Blank	n/a	n/a
FW-A100104	Equipment Blank	n/a	n/a
FW-A100201	DP 011B	BTEX01- 24	PAH01- 14
FW-A100202	DP 011B(FD)	n/a	n/a
FW-A100301	DP 015A	BTEX01- 29	n/a
FW-A100302	Equipment Blank	n/a	n/a
FW-A100303	Equipment Blank	n/a	n/a
FW-A100401	Trip Blank	n/a	n/a
FW-A100501	Equipment Blank	n/a	n/a
FW-A100502	Equipment Blank	n/a	n/a
FW-A100503	DP 023A	BTEX02- 13	PAH02- 4
FW-A100504	Duplicate	n/a	n/a
FW-A100505	Duplicate	n/a	n/a
FW-A100506	DP 029B	BTEX03- 12	n/a
FW-A100507	Equipment Blank	n/a	n/a
FW-A100508	DP 038A	BTEX04- 9	n/a
FW-A100509	Equipment Blank	n/a	n/a
FW-A100601	DP 044B	BTEX04- 21	n/a
FW-A100602	DP 016B	BTEX05- 6	PAH03- 6
FW-A100603	Trip Blank	n/a	n/a
FW-A100604	Equipment Blank	n/a	n/a
FW-A100605	Equipment Blank	n/a	n/a
FW-A100701	DP 012A	BTEX05- 8	n/a
FW-A100702	Equipment Blank	n/a	n/a
FW-A100703	DP 056A	BTEX06- 4	n/a
FW-A100704	DP 056B	BTEX06- 6	n/a
FW-A100705	DP 061A	BTEX06- 16	PAH03- 26
FW-A100706	DP 061A(FD)	n/a	n/a
FW-A100707	Equipment Blank	n/a	n/a
FW-A100708	Equipment Blank	n/a	n/a
FW-A100801	DP 073B	BTEX07- 22	PAH04- 23
FW-A100802	DP 073C	BTEX07- 23	PAH04- 24
FW-A100803	Equipment Blank	n/a	n/a
FW-A100804	Equipment Blank	n/a	n/a
FW-A100805	Trip Blank	n/a	n/a
FW-A100901	DP 087A	BTEX08- 12	n/a
FW-A100902	Equipment Blank	n/a	n/a
FW-A100903	DP 098B	BTEX09- 5	PAH05- 17
FW-A100904	DP 103C	BTEX09- 17	PAH05- 22
FW-A100905	DP 106B	BTEX09- 23	n/a
FW-A100906	Equipment Blank	n/a	n/a
FW-A100907	Equipment Blank	n/a	n/a
FW-A100908	DP 108B	BTEX10- 4	n/a
FW-A100909	DP 109A	BTEX10- 5	PAH06- 7
FW-A101001	DP 114B	BTEX10- 14	n/a
FW-A101002	DP 115B	BTEX10- 16	PAH06- 11
FW-A101003	Equipment Blank	n/a	n/a
FW-A101004	Equipment Blank	n/a	n/a
FW-A101005	DP 120B	BTEX10- 26	n/a
FW-A101006	DP 122C	BTEX10- 33	PAH06- 21
FW-A101007	DP 124B	BTEX10- 37	PAH06- 23
FW-A101008	Trip Blank	n/a	n/a
FW-A101101	Equipment Blank	n/a	n/a
FW-A101102	Equipment Blank	n/a	n/a

Control Number/Sample Identification Cross Reference			
Offsite Lab Control #	Sample Designation	Immunoassay BTEX Lab Batch #	Immunoassay PAH Lab Batch #
FW-A101201	DP 146A	BTEX12- 15	PAH07- 27
FW-A101201	DP 146A	BTEX15- 15	n/a
FW-A101202	DP 148B	BTEX12- 20	PAH07- 32
FW-A101202	DP 148B	BTEX15- 20	n/a
FW-A101203	DP 149B	BTEX12- 22	PAH08- 5
FW-A101203	DP 149B	BTEX15- 22	n/a
FW-A101204	Equipment Blank	n/a	n/a
FW-A101205	Equipment Blank	n/a	n/a
FW-A101206	DP 150B	BTEX12- 24	PAH08- 7
FW-A101206	DP 150B	BTEX15- 24	n/a
FW-A101207	DP 154B	BTEX13- 11	n/a
FW-A101208	Equipment Blank	n/a	n/a
FW-A101209	Equipment Blank	n/a	n/a
FW-A101301	DP 159B	BTEX13- 23	n/a
FW-A101302	DP 166B	BTEX14- 11	PAH08- 23
FW-A101303	DP 119A	BTEX14- 14	PAH08- 24
FW-A101304	DP 119B	BTEX14- 15	PAH08- 25
FW-A101305	DP 119C	BTEX14- 16	PAH08- 26
FW-A101306	DP 112B	BTEX14- 18	PAH08- 28
FW-A101307	DP 112C	BTEX14- 19	PAH08- 29
FW-A101308	Equipment Blank	n/a	n/a
FW-A101309	Equipment Blank	n/a	n/a
FW-A101401	Trip Blank	n/a	n/a
FW-A101501	DP 170A	BTEX16- 5	PAH09- 7
FW-A101502	DP 170A(FD)	n/a	n/a
FW-A101503	DP 172B	BTEX16- 15	PAH09- 13
FW-A101504	DP 172B(FD)	n/a	n/a
FW-A101505	Equipment Blank	n/a	n/a
FW-A101506	Equipment Blank	n/a	n/a
FW-A101507	Trip Blank	n/a	n/a
FW-A101601	Stockpile #1	n/a	n/a
FW-A101602	Stockpile #1	n/a	n/a
FW-A101603	Stockpile #1	n/a	n/a
FW-A101604	Stockpile #1	n/a	n/a
FW-A101605	Stockpile #1	n/a	n/a
FW-A101606	Stockpile #1	n/a	n/a
FW-A101607	Stockpile #1	n/a	n/a
FW-A101608	Stockpile #1	n/a	n/a
FW-A101609	Field Duplicate	n/a	n/a
FW-A101701	Stockpile #1	n/a	n/a
FW-A101702	Stockpile #1	n/a	n/a
FW-A101703	Stockpile #2	n/a	n/a
FW-A101704	Stockpile #2	n/a	n/a
FW-A101705	Stockpile #2	n/a	n/a
FW-A101706	Stockpile #2	n/a	n/a
FW-A101707	Stockpile #2	n/a	n/a
FW-A101708	Stockpile #2	n/a	n/a
FW-A101709	Field Duplicate	n/a	n/a
FW-A101801	Stockpile #2	n/a	n/a
FW-A101802	Stockpile #2	n/a	n/a
FW-A101803	Stockpile #2	n/a	n/a
FW-A101804	Stockpile #2	n/a	n/a
FW-A101805	Stockpile #2	n/a	n/a
FW-A101806	Stockpile #2	n/a	n/a
FW-A101901	Tank #4	n/a	n/a
FW-A101902	Tank #5	n/a	n/a
FW-A101903	Tank #6	n/a	n/a
FW-A101904	Tank #1	n/a	n/a
FW-A101905	Tank #2	n/a	n/a

Control Number/Sample Identification Cross Reference

<u>Offsite Lab Control #</u>	<u>Sample Designation</u>	<u>Immunoassay BTEX Lab Batch #</u>	<u>Immunoassay PAH Lab Batch #</u>
FW-A101906	Tank #3	n/a	n/a
FW-A101907	Tank Excavation	n/a	n/a
FW-A101908	Tank Excavation	n/a	n/a
FW-A101909	Tank Excavation	n/a	n/a
FW-A102001	Equipment Blank	n/a	n/a
FW-A102002	Equipment Blank	n/a	n/a
FW-A102003	Trip Blank	n/a	n/a
FW-A102004	Equipment Blank	n/a	n/a
FW-A102101	Field Duplicate	n/a	n/a
FW-A102102	Field Duplicate	n/a	n/a
FW-A102103	Field Duplicate	n/a	n/a
FW-A102201	Tank Excavation	n/a	n/a
FW-A102202	Tank Excavation	n/a	n/a
FW-A102203	Tank Excavation	n/a	n/a
FW-A102204	Tank Excavation	n/a	n/a
FW-A102205	Tank Excavation	n/a	n/a
FW-A102206	Tank Excavation	n/a	n/a
FW-A102207	Tank Excavation	n/a	n/a
FW-A102208	Tank Excavation	n/a	n/a
FW-A102209	Tank Excavation	n/a	n/a
FW-A102301	Stockpile #3	n/a	n/a
FW-A102302	Stockpile #3	n/a	n/a
FW-A102303	Stockpile #3	n/a	n/a
FW-A102304	Stockpile #3	n/a	n/a
FW-A102305	Stockpile #3	n/a	n/a
FW-A102306	Stockpile #3	n/a	n/a
FW-A102307	Stockpile #3	n/a	n/a
FW-A102308	Stockpile #3	n/a	n/a
FW-A102309	Stockpile #3	n/a	n/a
FW-A102401	Stockpile #3	n/a	n/a
FW-A102402	Stockpile #3	n/a	n/a
FW-A102403	Stockpile #3	n/a	n/a
FW-A102701	Equipment Blank	n/a	n/a
FW-A102702	Equipment Blank	n/a	n/a
FW-A102703	Equipment Blank	n/a	n/a
FW-A102704	Equipment Blank	n/a	n/a

FD = field duplicate

n/a = not applicable

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

PAH = Polycyclic Aromatic Hydrocarbons

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ADMINISTRATIVE RECORD

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ADMINISTRATIVE RECORD

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